

# NAVAL POSTGRADUATE SCHOOL Monterey, California





# **THESIS**

SOCIOECONOMIC AND PERSONAL VARIABLES EFFECTING RETENTION OF MEDICAL OFFICERS

by

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October 1982

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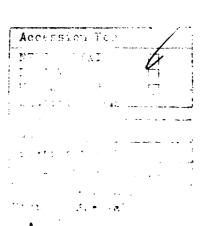
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Socioeconomic and Personal Variables Effecting
Retention of Medical Officers

by

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#### **ABSTRACT**

The question of which factors influence career decision of medical officers in the military services provides the focus for this thesis. It addresses the question of how a myriad of socioeconomic and personal variables impact upon physician retention.

Cross tabulation, multiple regression, and discriminant analysis are utilized to do a quantitative examination of the potential motivational factors involved in making career decisions. Both financial incentives and job components are found to be important variables affecting career decisions of military physicians.

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### I. INTRODUCTION

Attracting and retaining medical officers for the Armed Forces has been a recurring problem for over 200 years. In 1775, an act of the Continental Congress established a naval force, and authorized a surgeon and a surgeon's mate for each vessel (Handbook of the Hospital Corps, 1953). It was left to each ship's captain to recruit a surgeon for each voyage. The surgeon left at the end of the cruise and sought another position. There are analogous origins for other services. Today, while recruiting of physicians is a highly refined and organized art, recruiting and retaining physicians for the Military Health Services System (MHSS) is still a problem. The MHSS now consists of the medical departments of the Army, Navy, and Air Force, totalling approximately 10,000 medical officers.

There are several estimates of the numbers of physicians initially recruited, and the associated retention rates which would yield adequate physician manpower for the military services. For example, the Report of the Military Health Care Study (1975) provides estimates of the retention rates necessary to satisfy the demands placed on the MHSS through the 1990s. These are:

## "Optimistic" Retention Rate:

25% for unsponsored physicians, first committment 50% for sponsored physicians, first committment 85% for all physicians, subsequent committment

## "Pessimistic" Retention Rate:

15% for unsponsored physicians, first committment 40% for sponsored physicians, first committment 75% for all physicians, subsequent committment (The Department of Defense, 1974)

A sponsored physician is one who has incurred a military obligation as a result of federal funding or some part of his medical education.

The need to maintain the requisite levels of experienced medical officers leads to examination of the reason physicians elect to remain in the military or to depart upon completion of obligated service. The most frequent response to this question is that the physician can expect greater income in the private sector.

While income is certainly a major factor in the individual physician's decision to leave the military, to view it as the only answer to retention is to over-simplify a much more complex problem. Proposed explanations of individuals' decisions to become a career military officer, or to leave the military are as numerous as there are motivational theorists. While it is not the intent of this study to attempt to synthesize the major motivational explanations of behavior, some preliminary motivational theorizing is necessary to establish the procedure used here to analyze physician retention.

The act of choosing to continue or leave military employment can be defined as a social behavior. Such behavior is a topic of study for several disciplines, each providing both related and independent explanations for specific behaviors.

Motivation through financial incentives can trace its roots to the period of scientific management and the industrial revolution, and to Frederick Taylor who saw man as an "economic being," motivated by the desire to maximize financial gain (Chung, 1977). This theory of motivation was the front runner among organizations seeking to motivate the worker until challenged by the human relations theorists in the 1930s and 1940s.

There are economic and psychological reasons for the individual's concerns with compensation. Pay provides the extrinsic source of satisfying other needs and values held by the individual. Dissatisfaction with pay can lead to behaviors which do not coincide with the goals of the organization. For example, dissatisfaction with compensation may result in physicians' decisions to leave the military services in such numbers that retention goals are not attained.

Need theories emphasize internal stimuli that create and direct behavior (Chung, 1977). Although numerous theorists have contributed to need theories, Abraham Maslow's hierarchy of needs is perhaps the most well-known. Maslow specifies levels of human needs arranged by prepotency. These classes of needs in order of pursuit are: physiological, safety, socialization or affiliation, esteem or ego, and self actualization. Once the physiological needs are satisfied, the individual turns to successively higher levels of needs (Maslow, 1954).

Adelfer (1969) altered Maslow's levels of needs by condensing the needs hierarchy into existence, relatedness, and growth needs. He also arranged the needs hierarchy in order of their importance, but differed from Maslow's theory by stating that various levels of needs may be active at the same time (Chung, 1977). Maslow later agreed with Adelfer that various levels of needs may be active concurrently (Maslow, 1971).

Incentive theories are based on environmental or external influences of behavior. These external factors include all external stimuli such as economic rewards, negative reinforcement, peer group influence, or structural influence. B. F. Skinner may have summarized this philosophy as follows:

We may analyze a social episode by considering one organism at a time. Among the variables to be considered are those generated by a second organizm. We then consider the behavior of the second organism, assuming the first as a source of variables.

(Skinner, 1953)

This quote perhaps captures a behaviorist approach to physician retention. The second organism is the medical officer, the first, the sum of the socioeconomic and organizational variables impacting upon his career decisions.

Another approach to explaining behavior is based on expectancy theory. Here, behavior is viewed as a "...joint function of the degree to which a behavior is perceived as instrumental for the attainment of some outcomes, and the evaluation of the outcomes" (Scott and Mitchell, 1976). Expectancy theory accepts the tenet that motivation is the assumed or hypothetical cause of behavior and, as might be expected, there are several variations.

Lawler's version of expectancy theory, which expresses the role of cognition in behavior selection, has been summarized in the following statements:

- 1. People have expectancies about the likelihood that certain outcomes will follow their behavior.
- 2. People have a preference about the various outcomes that are potentially available to them.
- 3. People have expectancies about the likelihood that an action on their part will lead to the outcomes.
- 4. In any situation, the actions a person chooses to take are determined by the expectancies and preferences that the person has at the time. (Petrock and Gamboa, 1976).

Vroom's expectancy theory includes two models: one for the prediction of valences (the strength of a person's positive or negative affective

orientation toward an outcome) of outcomes; the second predicts the perception of force towards behavior (Scott and Mitchell, 1976). (An outcome is defined conceptually as the strength of the effectiveness orientation toward that outcome.) Vroom's first model states:

Valence of an outcome to a person is a monotonically increasing function of the algebraic sum of the products of the valences of all other outcomes and his conceptions of its instrumentality for the attainment of these outcomes.

(Vroom, 1964)

The second model predicts the force towards a behavior. Vroom suggests that the second model can be used to predict the choice to remain on the job, as well as to predict choice of occupation and effort.

Any one of the above approaches to behavior, or the myriad of other explanations of motivation and behavior, permit the examination of variables effecting career decisions. It is the intent of this thesis to analyze socioeconomic, organizational, and personal variables which impact upon physician retention in the military services.

#### II. METHODOLOGICAL APPROACH

Most motivational theories assume that there is an environmental or external influence on behavior. The variables which may be associated with a behavior are of many different types. A myriad of needs for both physical and psychological well being have been cited as the etiology of behavior. These explanations for motivation and behavior have contributed to the selection of the numerous variables for examination in this thesis. Table 1 lists the categories of variables used.

# TABLE 1 VARIABLE CATEGORIES

Personal and Family Background
Military Background
Attitudes Toward Women in the Military
Attitudes Toward Minorities in the Military
Financial Status
Satisfaction with Military Life
Perception of Civilian Peer Employment
Career Intention

Source: Author

Variables which relate to the personal and family history of the physician can be examined as determinants of behavior. Sex, race, economic status, education, and marital status all influence the daily behavior, and perhaps career decisions of almost everyone.

Military background factors influence behavior because they are part of the environment and the psychological mindset of the individual.

In arriving at career decision, a person may weigh the benefits and costs of making changes in his/her life. If, for example, one is a Navy commander with several years of service, consideration of changes in security and status are involved in altering careers. Additionally, it has been stated that the propensity to leave a position decreases with age and length of service, is higher for men than women, and "decreases with increasing salary, status, or skill" (Bartholomew and Forbes, 1979).

Because medical officers' perceptions and attitudes are endogenous variables which might demonstrate some correlation with intrinsic motivational factors, or show some correlation to career behavior, they will be examined in this study. An individual viewing the military as being gender or racially discriminatory in its personnel policies may make a career decision in association with this view.

The variables concerning financial status were examined for the obvious reasons. Relationships of interest here include medical officers' perception of themselves as adequately compensated for their efforts, and their perception of their pay and benefits in relation to their civilian peers. These factors involve several basic motivational issues. The needs for security and status have been repeatedly linked to salary and other financial assets. Additionally, compensation is the most frequently mentioned factor when reasons for physicians leaving the military prior to completion of retirement eligibility are discussed. Compensation has been accepted by most policy makers as the predominant source of medical officers' dissatisfaction with military service (GMENAC, 1979).

Variables which measure general satisfaction with the military service and career intent are important because of the broad perspective

they provide for analyzing career behavior. These variables provide the opportunity to examine both tangible and intangible sources of dissatisfaction with military life from many perspectives. These questions include both financial and quality of life issues needed for a general examination of career behavior patterns of physicians as a heterogenous aggregate.

Examination of these numerous variables as a source of motivation in career decisions is based on the assumption that a number of them will have a greater influence on behavior than others. A further necessary assumption for this study is that it is possible to overcome the heterogeneity of variables by quantifying them, and to express an individual's propensity to continue or to leave military employment as a "mathematical function of those variables on which it is believed to depend" (Bartholomew and Forbes, 1979).

The information on which this study is based was derived from the 1978 Rand Survey of officers and enlisted personnel which focused on persons on active duty in all four of the services. This study was completed for the Office of the Assistant Secretary of Defense/Manpower Reserve Affairs and Logistics. A thorough discussion of the survey and its sampling procedures can be found in Doering, et al. (1982).

The survey consisted of four questionnaires: two alternate forms for enlisted personnel, and two for officers. Forms 3 and 4 were given to officers. Form 3 dealt primarily with economic issues, civilian employment, retirement, and orientation to career options. Form 4 dealt with specific personnel policies, rotation experience, promotion, and the military's utilization of women.

The survey was begun in late January, 1979, over a widely dispersed geographical area. Data Collection was completed in June, 1979. A report of the findings was issued in March, 1982 (Doering and Hutzler, 1982). The survey was stratified by service, and within each service, officer samples were stratified by grade and sex as shown in Table 2.

TABLE 2
SAMPLE STRATIFICATION FOR OFFICER PERSONNEL

Sample Cell No.	Sex	Grade
1	male	0-1, 0-2, 0-3
2	male	0-1, 0-2, 0-3 0-3
3	male	0-4
4	male	0-5, 06
5	female	0-1 to 0-6

Source: Doering, Zahava D. and Hutzler, William P.,

Description of Officers and Enlisted Personnel
in the U.S. Armed Forces. Santa Monica, CA:
Rand, March, 1982, p. 9.

The initial data analysis for this thesis was developed by extracting data on physicians of the Army, Navy, and Air Force from the file. (The Marine Corps is provided medical support by the Navy and does not have its own medical corps.) Physician data were extracted by Military Occupational Specialty (MOS) and Officer Designator. Table 3 summarizes the physician population distribution for Forms 3 and 4 of the survey. Construction of the data files on these physicians provided the opportunity to examine their socioeconomic and military backgrounds, and attitudes about the military, which can be combined in the following areas.

- 1. Personal and Family Background
- 2. Military Background
- 3. Attitudes Toward Women in the Military
- 4. Attitudes Toward Minorities in the Military
- 5. Financial Status
- 6. Satisfaction with Military Life
- 7. Career Intention

TABLE 3
MEDICAL OFFICERS WHO RESPONDED TO THE SURVEY

	Army	Navy	Air Force	DoD
Form 3	55	85	62	202
Form 4	32	100	70	202
Total	87	185	132	404

Source: Author

When the two officer forms in the survey have identical questions, the responses are compiled in a single table. Total numbers may not sum to the number of physicians who answered the survey because of unanswered questions or invalid responses. Percentages may not sum to 100 percent because of rounding to the nearest tenth.

Section III is an initial analysis of the physician population drawn from the survey. The physician population was extracted from the survey by selecting out the MOS/Officer Designator of respondents. The medical officer MOS/ Designators used were taken from the Occupational Conversion Manual (DoD 1312.1M). Both regular and reserve medical officers were

used. The codes were recoded to permit use of a single variable name for physicians of all services.

Cross tabulations were done to develop a demographic presentation of selected variables. These operations were conducted on the unweighted sample population because the effect of data stratification could not be exactly determined. In order to more accurately compare physicians to the remainder of the officer community, cross tabulation was also done on the unweighted sample of non-physicians, except for the questions on perceptions of and attitudes toward women and minorities. In these areas, comparisons were made to the results presented in Doering and Hutzler's report of the survey (1982). The demographic picture provided by these cross tabulations is presented in Section III.

Section IV is an analysis of selected variables which appeared to have the strongest influence on career decisions. Analysis of these variables was completed using multiple regression and discriminant analysis of the career and noncareer populations. A careerist is defined as a person who had expressed the intent to remain in the military service for twenty or more years. A noncareerist was one who had expressed the intent to remain in the military service nineteen years or less.

The specific sample for this analysis was physicians who had four to ten years of military service, and who were male Caucasians. This group was chosen because it was felt that the four to ten year period would include the career decision point for the majority of the medical corps population. Male Caucasians were chosen because of the small number of females and minority members. Unfortunately, this target population

reduced the sample population to forty-eight members who completed F 3, and fifty-five who completed Form 4.

Once the target population was chosen, a correlation matrix was developed for the variables and used in the survey. The six variables which had the highest correlation with the years of intended service were selected for further analysis. Multiple regression and discriminant analyses were then done on these variables.

# III. SOCIOECONOMIC AND BEHAVIORAL CHARACTERISTICS OF MEDICAL OFFICERS

The response of medical officers to the DoD survey provide some insight into their preceptions and attitudes as an aggregate population. This section compares the survey responses of members of the three military medical departments to each other, and to the non-physician officer community. Table 4 lists the aggregate areas of comparison. The tables are presented in percentages. Appendix A contains complete tables for non-physician officer response by branch of service. Where comparisons between physician and non-physicians are made, the DoD response percentages for the non-physician population are shown with the physician table.

TABLE 4
AGGREGATE COMPARISON AREAS

- A. Personal and Family Background
- B. Military Background
- C. Attitudes Toward Women in the Military
- D. Attitudes Toward Minorities in the Military
- E. Financial Status
- F. Satisfaction with Military Life
- G. Perception of Civilian Peer Employment
- H. Career Intention

Source: Author

#### A. PERSONAL AND FAMILY BACKGROUND

The personal and family demographics of medical officers is presented in this section. The variables included are:

- 1. Sex
- 2. Race
- 3. Age at Service Entry
- 4. Place of Residence at Age 16
- 5. Type of Place Lived at Age 16
- 6. Marital Status at Service Entry
- 7. Current Marital Status
- 8. Years Married to Current Spouse
- 9. Age of Spouse
- 10. Education of Spouse
- 11. Number of Dependents
- 12. Father's Education
- 13. Mother's Education

The sex distribution of medical officers was similar within the services, and to the officer corps as a whole, as is seen in Table 5. Females constituted 11.9 percent of the medical officers, and 13.2 percent of the overall officer community.

TABLE 5
SEX

_	Army	Navy	Air Force	DoD	NonPhys
Male Female	89.5 10.5	88.7 11.3	86.4 13.6	88.1 11.9	86.7 13.3
Number Responding	86	185	132	403	13,771

The racial identification of medical officers is shown in the table below. There were variations by service. The Navy Medical Corps had the smallest number of minorities. The Army had a slightly larger black population, and the Air Force had the highest percentage of physicians who identified themselves as Asian. Eighty-three percent of medical officers identified themselves as Caucasian, while 93.7 percent of other officers did so.

TABLE 6
RACE

_	Army	Navy	Air Force	DoD	DoD NonPhys
Black	2.3	0.5	3.0	1.7	2.9
Hispanic	5.8	1.1	1.5	2.2	0.8
Asian	8.1	6.5	19.8	11.2	0.9
Caucasian	83.7	90.2	72.5	83.0	93.4
0ther	0.0	1.6	3.0	1.7	2.9
Number Responding	86	184	131	401	13,757
Origin: Author					

Table 7 shows that physicians were generally older than other officers when they entered service since most physicians enter after completing some portion of medical school. Less than 30 percent of medical officers and 89 percent of other officers were under age 25 at service entry.

Tables 8 and 9 show the geographic area of residence at age 16. The place of residence is coded by the four census regions. The areas which constitute these regions are shown in Appendix B. A large number of physicians appear to have lived in the south, and almost one-fourth of

the Air Force physicians reported having lived outside the United States at age 16. The smallest number reported having lived in rural areas.

TABLE 7

AGE AT ENTRY INTO MILITARY SERVICE

_	Army	Navy	Air Force	DoD	DoD NonPhys
17 to 20 Years 21 to 24 Years 25 to 28 Years 29 to 32 Years 33 to 50 Years	10.6 35.3 29.4 15.3 9.4	12.1 27.5 34.6 16.5 8.8	14.8 21.1 25.0 18.0 21.1	12.7 27.1 30.6 16.7 12.9	32.4 56.6 8.5 1.7 0.9
Number Responding Origin: Author	85	183	127	395	13,806

TABLE 8

PLACE OF RESIDENCE AT AGE SIXTEEN

3 12.5 16.3 3 43.8	20.0	19.2
3 43.8	24.3	
	24.3	34.1
18.8		
-		
2 80	70	182

As shown in Tables 10, and 11, more than half of physicians were married when they entered the military service, and 82.8 percent were married when the survey was completed. At service entry, 22.6 percent of non-physicians were married, and 74.8 percent were married at the time of the sur/ey.

TABLE 9

TYPE OF PLACE LIVED AT AGE SIXTEEN

_	Army	Navy	Air Force	DoD
Large City or Suburb (Pop. 250,000 or more)	37.5	42.0	47.1	43.1
Medium or Small City or Suburb (50-250,000)	56.3	50.0	42.9	48.5
Farm/Ranch or Other Rural Area	6.3	8.0	10.0	8.4
Number Responding	32	100	70	202
Source: Author				

TABLE 10

MARITAL STATUS AT SERVICE ENTRY

-	Army	Navy	Air Force	DoD	DoD NonPhys
Married Divorced/Separated Single/Nvr Married	54.0 0.0 46.0	53.0 2.7 44.3	62.9 2.4 34.8	56.4 2.5 41.6	22.6 1.2 76.2
Number Responding Source: Author	87	185	132	404	9,349

TABLE 11
CURRENT MARITAL STATUS

	Army	Navy	Air Force	DoD	DoD NonPhys
Married	87.2	81.1	82.4	82.8	74.8
Widowed/Divorced/ Separated	3.6	3.7	3.1	5.7	5.4
Single/Nvr Married	9.3	15.1	7.6	11.4	19.7
Number Responding	86	185	131	402	9,343
Source: Author					

TABLE 12
YEARS MARRIED TO CURRENT SPOUSE

	Army	Navy	Air Force	DoD
O to 5 Years	20.8	30.3	25.2	26.5
6 to 10 Years	37.7	29.6	28.8	31.2
11 to 15 Years	23.4	17.8	21.6	20.3
16 to 20 Years	10.4	11.8	10.8	11.2
21 or More Years	6.5	9.2	11.7	9.4
Number Responding	77	152	112	341
Source: Author				

TABLE 13

AGE OF SPOUSE

	Army	Navy	Air Force	DoD
18 to 24	1.4	6.4	2.0	3.8
25 to 29	25.4	28.6	23.8	25.6
30 to 35	54.9	33.6	41.6	41.0
36 to 40	12.7	16.4	18.8	16.3
41 to 45	2.8	10.0	8.9	8.0
46 or Over	2.8	5.0	5.0	4.5
Number Responding	71	140	101	312
Source: Author				

The spouses of medical officers tended to have more formal education than the spouses of other officers. As shown below, a much higher percentage of medical officers reported that their spouse had college experience. For example, 13 percent of medical officers indicated that their spouse had seven or more years of college work as compared to only 2 percent of other officers. Only 1.2 percent of medical officers reported that their spouses had eleven years or less of school as compared to 17.5 percent of non-physician officers.

TABLE 14
EDUCATION OF SPOUSE

-	Army	Navy	Air Force	DoD	DoD NonPhys
11th Grade/Less 12th Grade/GED 1-2 Years College 3-4 Years College 5-6 Years College 7 or More Yrs Coll	1.3 5.2 18.2 37.7 26.0 11.7	1.3 9.2 19.1 41.4 17.1 11.8	0.9 15.5 18.2 37.3 12.7 15.5	1.2 10.3 18.6 39.2 17.7 13.0	18.0 17.4 22.0 29.8 10.9 1.9
Number Responding Source: Author	77	152	110	339	13,806

The parents of medical officers had more years of education than those of other officers. Twenty-five percent of physicians' fathers had five or more years of college; whereas, 12.7 percent of non-physicians' fathers had this same level of education. At this level, there was less dramatic difference in the reported education of mothers, with 9.3 percent of medical officers' and 5.2 percent of other officers' mothers having completed this level of education. The father was better educated than the mother in both groups. However, the physicians' mothers were more educated than the fathers of non-physicians. Approximately 58 percent of medical officers' fathers had some college education, compared to approximately 42 percent of other officers' fathers, and at this level, mothers were 48.1 and 36.2 percent, respectively. It has been found in some studies that there is a strong correlation between mothers' level of education and socioeconomic status (Sellman, et al., 1982).

TABLE 15
FATHERS' EDUCATION

	Army	Navy	Air Force	DoD	DoD NonPhys
11th Grade/Less 12th Grade/GED 1-2 Years College 3-4 Years College 5 or More Yrs Coll	6.9 34.5 10.3 27.6 20.7	18.2 19.3 11.4 22.7 28.4	25.4 23.8 6.3 20.6 23.8	18.8 23.2 9.4 22.7 25.4	26.0 31.2 13.3 16.8 12.7
Number Responding	29	88	63	181	8,543
Source: Author					

TABLE 16
MOTHERS' EDUCATION

	Army	Navy	Air Force	DoD	DoD NonPhys
11th Grade/Less 12th Grade/GED 1-2 Years College 3-4 Years College 5 or More Yrs Coll	16.1 35.5 19.4 22.6 6.5	18.2 37.5 14.8 20.5 9.1	21.9 25.0 17.2 25.0 10.9	19.1 32.8 16.4 22.4 9.3	18.3 45.5 16.2 14.8 5.2
Number Responding Source: Author	31	88	64	183	8,570

Table 17 presents information on immediate families' military experience. There were slight variations by service, and medical officers were different from the other officers. Fewer members of the families of physicians had served in the military.

The last table in this section shows the number of dependents of other than self and spouse. This question was worded so as to include all dependents, not children only.

TABLE 17

NUMBER OF IMMEDIATE FAMILY WHO HAD SERVED IN THE MILITARY

	Army	Navy	Air Force	DoD	DoD NonPhys
None	37.5	33.0	42.0	36.8	25.7
0ne	43.7	41.0	39.1	40.8	43.9
Two	12.5	23.0	15.9	18.9	20.3
Three or More	6.2	3.0	2.9	3.5	10.1
Number Responding	32	100	69	201	9,294
Source: Author					

TABLE 18

NUMBER OF DEPENDENTS OTHER THAN SELF AND SPOUSE

	Army	Navy	Air Force	DoD
Zero	26.4	30.4	19.1	25.9
0ne	12.6	16.8	16.8	15.9
Two	39.1	23.4	26.0	27.6
Three	10.3	16.8	16.0	15.2
Four	8.0	10.3	13.0	10.7
Five or More	3.4	2.2	9.2	4.7
Number Responding	87	184	131	402

#### B. MILITARY BACKGROUND

The tables in this section contain information on variables concerning the military and assignment history and experience of medical officers.

Variables included are:

- 1. Rank
- 2. Years of Service
- 3. Commissioning Source

- 4. Status of Initial Period of Obligated Service
- 5. Remaining Obligated Service
- 6. Current Geographic Assignment
- 7. Currently Assigned to a Ship
- 8. Number of PCS Moves
- 9. PCS Problems Experienced

The rank distribution of medical officers is shown below. It is similar to the rank distribution of other officers who completed the survey. No 01's or 02's are shown because physicians enter active military service as 03's. No general/flag officers were included in the survey.

TABLE 19
DISTRIBUTION OF MEDICAL OFFICERS BY RANK

-	Army	Navy	Air Force	DoD	DoD NonPhys
03	23.5	32.8	15.9	25.3	38.8
04	38.8	25.7	41.7	33.8	32.5
05	23.5	20.2	27.2	23.3	20.0
06	14.1	21.3	15.2	17.8	8.8
Number Responding	85	183	132	400	13,806
Source: Author					

The years of service are shown in the next table. It shows that a representative distribution of medical officers took the survey. The years of service can be directly correlated to rank.

Commissioning or procurement source of medical officers varied by service. Army and Air Force physicians entered the service most frequently

TABLE 20
DISTRIBUTION BY YEARS OF SERVICE

4 47.0 8 18.8 5 11.0	48.5 20.5	46.3 20.0	9.2
		20.0	17 E
ς 11 Λ			17.5
0 11.0	15.9	13.0	18.8
5 9.4	3.8	8.3	18.5
7 9.4	9.1	8.5	19.2
7 4.4	2.3	4.0	16.8
7 181	132	400	13,806
	7 9.4 7 4.4	7 9.4 9.1 7 4.4 2.3	7 9.4 9.1 8.5 7 4.4 2.3 4.0

through direct appointment. Navy physicians were more widely distributed by commissioning source, but more of them entered via the Health Professional Scholarships Program than any other route. There are expected variances between medical officers and non-physicians. The major commissioning source of other officers were OCS/OTC and ROTC.

TABLE 21
DISTRIBUTION BY SOURCE OF ENTRY

	Army	Navy	Air Force	DoD	DoD NonPhys
Academy Graduate	5.7	1.1	5.4	3.5	11.2
OCS/OTS	5.7	1.1	1.6	2.3	25.7
ROTC-Req	14.9	0.5	7.0	5.8	19.9
ROTC-Scholarship	8.0	0.0	6.2	3.8	5.0
Direct Appointment	36.8	28.6	49.6	37.2	10.9
Reserve OC	2.3	2.6	0.8	1.8	1.2
Health Professional Scholarship Prog.	8.0	39.5	9.3	19.8	**
Medical Specialties Program	2.3	12.5	10.1	8.5	***
0ther	16.1	23.1	10.1	17.3	5.8
Number Responding	87	182	129	398	13,701
Source: Author					

The current status in relation to the initial period of obligated service is shown in the next table. Thirty-five percent of medical officers who were in their first four years of service were in their initial period of obligated service. The number of people who were in the initial period of obligated service diminished as years of service increased, as would be expected. In the first four years of service, the number of medical officers in the initial period of service was much higher than the number of other officers, of whom only 5.4 percent were still serving their initial obligation.

TABLE 22
STATUS OF INITIAL OBLIGATED SERVICE

	A	rmy	N	avy	Air	Force		οD	DoD N	ionPh ys
YOS	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
0 to 1	28.6	1.4	16 0	0.6	18.9	0.0	24.5	0.7	9.0	0.5
2 Years	4.3	0.0	5.2	1.9	7.6	2.3	5.7	2.4	5.7	0.9
3 Years	4.3	1.4	4.5	2.6	3.0	2.3	3.9	2.7	3.7	1.4
4 Years	2.9	2.9	2.6	3.2	0.0	2.3	0.9	2.8	2.4	2.6
5 Years	2.9	1.4	0.6	1.9	3.0	1.5	2.2	1.6	1.7	2.8
6 Years	2.9	2.9	1.9	2.6	3.0	0.7	2.3	2.1	1.3	3.3
7 Years	1.4	8.6	2.6	3.9	0.7	1.5	1.6	4.7	1.0	2.8
8 Years	1.4	2.9	3.2	4.5	3.8	1.5	2.8	3.0	0.9	2.8
9 Years	1.4	4.3	1.3	0.6	0.0	5.3	0.9	3.4	0.4	3.4
LO Years	1.4	2.9	1.3	31.2	0.7	18.9	1.1	17.7	0.3	3.5
Over 10	0.0	18.6	1.3	3.1	0.8	18.9	0.7	13.5	1.1	42.8
Number Re	cod	70	ļ	154		132		356		8,953

Source: Author

As expected, physicians also had longer periods of remaining obligated service, especially among those with over ten years of service. In this category, 18.8 percent of physicians and 38.5 percent of non-physicians had

TABLE 23
REMAINING OBLIGATED SERVICE

<del></del>		<del></del>					
Army YOS	Less than 2 Years	2 or More Years	No Obligation				
0 TO 2 Years	13.8	13.8	3.4				
3 to 6 Years	11.4	5.6	4.4				
7 to 10 Years	2.3	6.8	8.0				
Over 10 Years	0.0	4.6	21.8				
		4.0	21.0				
Number Responding	g 87						
Navy YOS	Less than 2 Years	2 or More Years	No Obligation				
0 TO 2 Years	13.0	14.7	3.3				
3 to 6 Years	10.9	6.0	5.8				
7 to 10 Years	4.5	7.1	3.8				
Over 10 Years	4.9	4.3	23.9				
		110	20.3				
Number Responding	g 184						
Air Force YOS	Less than 2 Years	2 or More Years	No Obligation				
0 TO 2 Years	25.0	6.1	3.8				
3 to 6 Years	11.4	6.8	6.1				
7 to 10 Years	6.1	10.6	3.8				
Over 10 Years	4.5	5.3	10.6				
Number Respondin	g 132						
DoD Yos	Less than 2 Years	2 or More Years	No Obligation				
0 TO 2 Years	17.3	11.5	3.5				
3 to 6 Years	11.2	6.1	5.4				
7 to 10 Years	4.3	8.2	5.2				
Over 10 Years	3.1	4.7	18.8				
		7.1	10.0				
Number Responding 403							
DoD NonPhys YOS	Less than 2 Years	2 or More Years	No Obligation				
0 TO 2 Years	5.0	8.8	0.8				
3 to 6 Years	8.3	5.1	6.3				
7 to 10 Years	3.5	2.9	9.3				
Over 10 Years	6.2	4.2	38.5				
Number Respondin	g 9,066						
Source: Author							

no obligated service remaining. Medical officers varied by service, particularly in the first two years of service. In this period, 13.8 percent of Army, 13 percent of Navy, and 25 percent of Air Force medical officers had less than two years obligated service remaining.

The geographic assignment of physicians is shown in the next two tables. Most were located in the United States. One-third of Navy medical officers who responded to the survey were serving in California. Only one was assigned to a ship. There were expected variances by service.

TABLE 24

CURRENT LOCATION

	Army	Navy	Air Force	DoD
California	8.2	33.5	12.7	21.3
Florida	0.0	12.4	11.2	9.4
Maryland	0.0	13.0	6.0	7.9
Texas	15.3	2.2	18.7	10.4
Virginia	1.2	9.2	0.0	4.5
Other Conus	61.2	21.1	38.1	34.7
NonConus	16.5	8.6	13.4	11.9
Number Responding	85	185	134	404
Source: Author				

TABLE 25
CURRENTLY ASSIGNED TO A SHIP

	Army	Navy	Air Force	DoD
Yes No	0.0 100.0	1.2 98.7	0.0 100.0	0.6 99.4
Number Responding	28	80	52	160
Source: Author				

The last two tables in this section provide demographics on permanent change of station assignments. The frequency of moves and PCS-related problems were similar across services. Medical officers were similar to other officers except in the area of off-duty employment, where 31.7 percent of the medical officers reported difficulty in finding off-duty employment as compared to 7.0 percent of other officers. This may be a function of which officers seek civilian employment while on active military service.

TABLE 26
TIMES MOVED DUE TO PERMANENT CHANGE OF STATION

	Army	Navy	Air Force	DoD
Zero or One	31.0	34.6	44.1	37.5
Two	6.9	17.3	16.2	15.4
Three	3.4	12.2	1.5	7.2
Four	4.1	7.1	16.2	13.3
Five or More	31.0	28.5	22.0	26.9
Number Responding	29	98	68	195
Source: Author				

TABLE 27
PERMANENT CHANGE OF STATION PROBLEMS

	Army	Navy	Air Force	DoD	DoD NonPhys
Adj. Higher Cost/living	46.9	61.7	50.0	55.2	59.6
Moving/Est. New Hsehld.	90.6	80.4	75.0	80.2	79.1
Paying Unreim. Mvg. Exp.	59.4	55.8	53.0	55.5	58.3
Finding Off-duty Employ.	31.2	29.4	35.1	31.7	7.0
Continuing Ecucation	48.1	36.0	41.2	39.4	40.1
Finding Perm. Housing	50.0	51.6	53.8	52.1	52.6
Finding Shop/Rec Facil.	25.8	30.2	35.3	31.3	28.0
Child Adj. to New Envmt.	52.4	41.5	38	42.0	47.1
Spouse Adj. to New Envmt.	48.1	52.5	45.6	49.4	49.5
Self Adj. to New Envmt.	32.3	40.8	36.2	37.9	33.8
Number Responding	31	98	69	198	8,887
Source: Author					

# C. ATTITUDES TOWARD WOMEN IN THE MILITARY

This section presents the data on variables demonstrating the perceptions and attitudes of military physicians concerning women in the military service. This includes the following variables:

- 1. Attitudes Towards Women in the Military Service
- 2. Number of Women in the Work Unit
- 3. Perceptions of Women in the Work Unit

Most medical officers' responses indicated that they felt that women are capable of performing in the role of military medical officer, and that women are treated equally in the areas of promotion, training, and working conditions. There was disagreement as to whether women should be trained and used in combat. Army medical officers consistently rated the ability of women to perform in the military lower than either Navy or Air Force physicians.

Medical officers responses were similar to those of other officers. There were some variations, however. For example, only 80 percent of the officers felt that women were physically capable of performing their jobs, whereas approximately 95 percent of medical officers responded in the affirmative in this area. (See Tables 28, 29 and 30.)

TABLE 28
ATTITUDES TOWARDS WOMEN IN THE MILITARY

-	Army	Navy	Air Force	DoD
Should Be in My MOS	80.7	99.0	97.0	95.5
Phys. Capable My MOS	83.9	97.0	98.6	95.5
Ment. Capable MY MOS	71.0	87.9	87.0	84.9
Should Learn Use Weapons	68.8	69.7	65.2	68.0
Should Engage in Hand to Hand Combat	37.5	44.0	44.1	43.0
Should be Trained and Used in Combat	34.4	59.0	44.9	52.5
Number Responding	32	100	69	201

TABLE 29

NUMBER OF WOMEN IN WORK UNIT

ce Dol	Air Force	Navy	Army	
6.0	8.7	4.0	6.5	More Than Half
22.0	29.0	16.0	25.8	About Half
27.5	31.9	29.0	12.9	Some
29.5	17.4	36.0	35.5	A Few
15.0	13.0	15.0	19.4	None
200	69	100	31	Number Responding
	69	100	31	Number Responding Source: Author

TABLE 30
WOMEN IN MY WORK UNIT

_	Army	Navy	Air Force	DoD
More Likely to Work Outside Training	29.2	11.9	11.9	14.4
Get Complaints Handled Faster	16.7	14.3	23.4	17.9
Can't Take Criticism	17.4	13.1	20.0	16.2
Receive Less Respect as Officers	33.3	32.2	21.7	28.6
Promoted Ahead of Men	0.0	1.2	1.7	1.2
Will Work Extra Hours	70.8	59.5	62.1	62.0
Expect Special Treatment	25.0	19.1	11.9	17.4
Supervise as Well as Men	70.8	57.1	67.2	62.6
Number Responding	24	84	60	168
Source: Author				

## D. ATTITUDES TOWARD MINORITIES IN THE MILITARY SERVICES

Tables in this section show the perspectives of physicians on racial issues in the military. The variables examined were:

- 1. Experience With Racial Discrimination
- 2. Racial Minorities in Work Unit
- 3. Own Race Complains Others Are Treated Better
- 4. Own Race Avoids Association With Other Races
- 5. Own Race Talks Bad About Other Races
- 6. Own Race Talks About Problems of Other Races
- 7. Other Members of My Race in Unit
- 8. Importance of Equal Opportunity/Race Relations to Leaders
- 9. Treatment of Blacks-Whites
- 10. Race With Best Promotion Chances in Officer Grades

There were few variations among the physicians of the three services. Medical officers varied slightly from other officers in their views of treatment of minorities. For example, those who indicated that blacks were treated better constituted 21.9 percent of Army medical officers, 12.0 percent of Navy medical officers, and 15.8 percent of Air Force medical officers. In the overall officer population, 23.4 percent of officers responded that blacks were treated better.

TABLE 31
EXPERIENCE WITH RACIAL DISCRIMINATION

Army	Navy	Air Force	DoD
13.3	6.0	7.1	7.5
10.0	7.1	8.7	8.1
6.7	1.0	0.0	1.5
0.0	5.0	4.3	4.0
0.0	4.0	4.3	3.5
0.0	4.0	5.7	4.0
31	99	69	199
	13.3 10.0 6.7 0.0 0.0	13.3 6.0 10.0 7.1 6.7 1.0 0.0 5.0 0.0 4.0 0.0 4.0	13.3 6.0 7.1 10.0 7.1 8.7 6.7 1.0 0.0 0.0 5.0 4.3 0.0 4.0 4.3 0.0 4.0 5.7

TABLE 32

RACIAL MINORITIES IN WORK UNIT

	Army	Navy	Air Force	DoD
Most More Than Half About Half Some A Few None	0.0 9.7 12.9 41.9 32.3 3.2	2.0 2.0 9.1 40.4 36.4 10.1	1.4 5.8 17.4 39.1 24.6 11.6	1.5 4.5 12.6 40.2 32.7 9.5
Number Responding Source: Author	31	99	69	199

TABLE 33

OWN RACE COMPLAINS THAT OTHERS ARE TREATED BETTER

	Army	Navy	Air Force	DoD
Often	3.3	9.4	7.9	8.0
Sometimes	16.7	6.3	15.9	11.1
Seldom	36.7	42.7	28.6	37.0
Never	43.3	41.7	47.6	43.9
Number Responding	30	96	63	189
Source: Author				

TABLE 34

OWN RACE AVOIDS ASSOCIATION WITH OTHER RACES

	Army	Navy	Air Force	DoD
Often	0.0	5.3	3.2	3.7
Sometimes	16.7	8.5	12.7	11.2
Seldom	46.7	35.1	33.3	36.4
Never	36.7	51.1	50.8	48.7
Number Responding	30	94	63	187

TABLE 35
OWN RACE TALKS BAD ABOUT OTHER RACES

	Army	Navy	Air Force	DoD
Often	0.0	3.1	3.2	2.7
Sometimes	13.3	29.2	23.8	24.9
Seldom .	60.0	40.6	38.1	42.9
Never	26.7	27.1	34.9	29.6
Number Responding	30	96	63	189
Source: Author				

TABLE 36

OWN RACE TALKS ABOUT PROBLEMS OF OTHER RACES

	Army	Navy	Air Force	DoD
Often	0.0	5.2	9.4	5.8
Sometimes	50.0	28.1	28.1	31.6
Se1dom	43.3	41.7	31.3	38.4
Never	6.7	25.0	31.3	24.2
Number Responding	30	96	64	190
Source: Author		30	•	•

TABLE 37
OTHER MEMBERS OF MY RACE IN UNIT

	Army	Navy	Air Force	DoD
Same Race No Other	96.8 3.2	97.0 3.0	91.4 8.6	95.0 5.0
Number Responding	31	99	70	200
Source: Author				

TABLE 38

IMPORTANCE OF EQUAL OPPORTUNITY-RACE RELATIONS TO LEADERS

	Army	Navy	Air Force	DoD
Very Important	28.1	23.2	34.3	27.9
Important	53.2	65.7	52.9	59.2
Not Important	18.8	11.1	12.9	12.9
Number Responding	32	99	70	201
Source: Author				

TABLE 39
TREATMENT OF BLACKS-WHITES

	Army	Navy	Air Force	DoD
Blacks Better Treated Same Blacks Worse	21.9 71.9 6.3	12.0 75.0 13.0	15.8 80.0 4.3	14.9 76.2 8.9
Number Responding Source: Author	32	100	70	202

TABLE 40

RACE WITH BEST PROMOTION CHANCES IN OFFICER GRADES

	Army	Navy	Air Force	DcD
White	19.4	25.3	21.4	23.0
Black	19.4	5.1	7.1	8.0
Other Minorities	0.0	1.0	0.0	0.5
Equal Chance	61.3	68.7	71.4	68.5
Number Responding	31	99	70	200
Source: Author				

# E. FINANCIAL STATUS

Tables 41 through 51 show the financial demographics of medical officers who responded to the survey. The average family income for this group in 1978 was \$37,800. The tables include the following variables.

- 1. Total Family Income in 1978
- 2. Reported Monthly Basic Pay
- 3. Reported Monthly BAQ
- 4. Reported Monthly BAS

- 5. Value of Given Assets
- 6. Total Outstanding Debts
- 7. Year Purchased Main Home
- 8. Purchase Price of Main Home
- 9. Mortgage Payment on Main Home
- 10. Financial Situation vs. Three Years Previously
- 11. Expected Civilian Earnings Per Year

The first table shows the gross family income of medical officers in 1978. There were some variances by service, but these were small. As expected, physicians indicated a much higher level of income than other officers. Twenty-one percent of physicians reported that their family income was over \$45,000 in 1978; only 2.9 percent of other officers indicated this earning level. Medical officers who responded that they had a gross family income of \$25,000 or less constituted 25.8 percent of the respondents, while 59.5 percent of other officers indicated this earning level.

TABLE 41
TOTAL FAMILY INCOME IN 1978

	Army	Navy	Air Force	DoD	DoD NonPhys
0 to \$15,000	5.9	3.7	3.6	4.3	19.5
\$15,001 to \$25,000	23.5	26.2	12.7	21.5	40.0
\$25,001 to \$35,000	19.6	16.2	27.3	20.4	27.9
\$35,001 to \$45,000	31.4	36.2	29.1	32.8	9.6
Over \$45,000	19.6	17.5	27.3	21.0	2.9
Number Responding	51	80	55	186	17,229
Source: Author					

The next three tables present the basic pay, basic allowance for quarters (BAQ), and basic allowance for subsistence (BAS), reported by physicians.

TABLE 42
REPORTED MONTHLY BASIC PAY

Army	Navy	Air Force	DoD	DoD NonPhys
29.4	36.2	28.3	31.9	27.0
45.1	37.5	38.3	39.8	43.8
17.6	16.2	26.7	19.9	29.1
51	80	60	191	6,735
	29.4	29.4 36.2	29.4 36.2 28.3	29.4 36.2 28.3 31.9
	45.1	45.1 37.5	45.1 37.5 38.3	45.1 37.5 38.3 39.8
	17.6	17.6 16.2	17.6 16.2 26.7	17.6 16.2 26.7 19.9

TABLE 43
REPORTED MONTHLY BAQ

	Army	Navy	Air Force	DoD
)	30.2	17.1	28.8	24.7
\$150 to \$249	5.7	17.1	6.8	9.8
\$250 to \$299	18.9	28.6	22.0	23.6
\$300 to \$349	24.5	24.3	25.4	24.7
Over \$350	20.7	27.1	16.9	22.0
Number Responding	53	70	59	182
Source: Author				

TABLE 44
REPORTED MONTHLY BAS

	Army	Navy	Air Force	DoD
0 to \$49	6.0	5.1	7.0	5.9
\$50 to \$59	20.0	17.9	31.6	23.1
\$60 to \$69	66.0	73.1	50.9	64.3
Over \$70	8.0	3.8	10.5	7.0
Number Responding	50	78	57	185
Source: Author				

The next table shows the reported value of given assets of medical officers. They varied by service. For example, 41.1 percent of Air Force, 27.3 percent of Navy, and 30.9 percent of Army physicians indicated that their current assets were valued at \$15,000 or greater. The responses of physicians were similar to the responses of other officers.

TABLE 45
VALUE OF GIVEN ASSETS

	Army	Navy	Air Force	DoD	DoD NonPhys
\$1 to \$499	3.6	2.7	2.0	2.5	6.5
\$500 to \$1,999	9.1	12.2	5.2	9.1	15.1
\$2,000 to \$4,999	14.5	17.8	18.1	17.2	20.1
\$5,000 to \$9,999	21.8	19.1	19.8	20.3	18.8
\$10,000 to \$14,999	16.4	8.4	8.5	10.6	11.5
Over \$15,000	30.9	27.3	41.1	32.5	26.8
Number Responding	55	83	59	197	6,741
Source: Author					

The indebtedness of medical officers did not vary greatly by service, nor did physicians vary much from other officers. The major difference between medical officers and other officers was at the over \$15,000 level where the response was 13.5 percent and 5.1 percent, respectively.

TABLE 46
TOTAL OUTSTANDING DEBTS

	Army	Navy	Air Force	DoD	DoD NonPhys
0	21.8	15.3	29.0	21.3	18.7
\$1 to \$499	7.3	2.4	6.5	5.0	10.2
\$500 to \$1,999	12.7	12.9	17.7	14.5	16.9
\$2,000 to \$4,999	18.2	20.0	14.5	18.0	24.8
\$5,000 to \$9,999	21.8	20.0	11.3	13.5	18.4
\$10,000 to \$15,000	10.9	9.4	8.1	9.5	5.9
Over \$15,000	7.3	18.8	11.3	13.5	5.1
Number Responding	55	84	61	200	9,270
Source: Author					

The next group of tables show statistics on home ownership. Physicians tended to own homes at the same rate as other officers, but more expensive ones with correspondingly larger mortgage payments.

TABLE 47
YEAR PURCHASED MAIN HOME

	Army	Navy	Air Force	DoD	DoD NonPhys
Not Applicable	40.7	35.4	38.3	37.8	36.6
1965 to 1970	3.7	3.8	8.2	5.2	3.4
1971 to 1975	13.0	12.7	15.0	13.5	16.1
1976 to 1979	42.6	46.8	40.0	43.5	24.4
Number Responding	54	79	60	193	6,913
Source: Author					

TABLE 48
PURCHASE PRICE OF MAIN HOME

	Army	Navy	Air Force	DoD	DoD NonPhys
Not Applicable	40.7	35.9	40.3	38.6	25.1
\$0 to \$39,999	9.2	4.4	14.1	8.5	39.6
\$40,000 to \$59,999	24.1	19.2	15.8	19.6	24.4
\$60,000 to \$79,999	11.0	19.2	17.5	16.4	7.5
\$80,000 to \$99,999	18.0	10.2	6.8	9.5	3.4
Over \$100,000	3.7	11.5	5.3	7.4	
Number Responding	54	78	57	189	4,357
Source: Author					•

TABLE 49
MORTGAGE PAYMENT ON MAIN HOME

	Army	Navy	Air Force	DoD	DoD NonPhy
Not Applicable	40.7	34.1	39.7	37.6	
\$0 to \$399	14.8	12.2	24.1	15.5	42.2
\$400 to \$499	14.8	15.8	13.8	14.9	24.9
\$500 to \$599	11.1	15.8	8.6	12.4	17.0
\$600 to \$699	7.4	6.1	5.2	6.2	9.5
\$700 to \$799	7.4	6.1	5.2	6.2	4.1
Over \$800	3.7	9.8	3.4	6.2	2.2
Number Responding	54	82	58	194	4,372
Source: Author					

The following table represents physicians' perceptions of their current financial status as compared to that three years before. Medical officers of the three services varied slightly from each other and from other officers.

TABLE 50
FINANCIAL SITUATION NOW VS. THREE YEARS AGO

	Army	Navy	Air Force	DoD	DoD NonPhys
Lot Better Now	23.6	32.0	21.0	26.4	19.4
Somewhat Better Now	43.6	26.1	41.9	35.8	30.0
About the Same	16.4	26.1	11.3	18.9	21.1
Somewhat Worse Now	9.1	13.1	16.1	12.9	21.0
Lot Worse Now	7.3	2.6	9.7	6.0	8.5
Number Responding	55	84	62	201	6,859
Source: Author					

The last table in this section shows medical officers' responses to the question of expected civilian earnings per year. Physicians' responses were very different from those of other officers. Ninety percent of the overall officer community estimated that their income level in the civilian community would be less than \$40,000 per year. Only 8.5 percent of physicians responded in this manner.

TABLE 51

EXPECTED CIVILIAN EARNINGS PER YEAR

	Army	Navy	Air Force	DoD	DoD NonPhys
\$0 to \$39,999	10.0	7.4	9.0	8.5	90.0
\$40,000 to \$49,999	18.0	8.7	12.5	12.4	5.6
\$50,000 to \$59,999	12.0	25.0	17.8	19.4	2.0
\$60,000 to \$69,999	26.0	22.5	23.1	23.2	0.9
\$70,000 to \$79,999	12.0	22.4	16.0	17.7	0.7
\$80,000 to \$89,999	12.0	4.9	10.7	8.6	0 3
Over \$90,000	10.0	8.7	10.7	9.7	0.5
Mean	\$60,630	\$61,245	\$61,735	\$61,209	\$24,290
Number Responding	50	80	56	186	5,984

### F. SATISFACTION WITH MILITARY LIFE

The next series of tables shows variables intended to measure satisfaction with military life. The variables included are:

- 1. Satisfaction With Military Life
- 2. Satisfaction With Current Location
- 3. Would Extend Tour at Location
- 4. Next Tour Will Be an Undesirable Location
- 5. Military Life Is as Expected
- 6. Chance of Promotion to Next Pay Grade
- 7. Reason for Leaving Military Service

The first table shows responses to the question ". . . taking all things together, how satisfied or dissatisfied are you with the military as a way of life?". Responses were on a Likert-type scale, including seven responses ranging from very dissatisfied (1) to very satisfied (7). Here, the scale was condesed to five responses. Medical officers marked the lower end of the scale more frequently than did other officers.

TABLE 52
SATISFACTION WITH MILITARY LIFE

	Army	Navy	Air Force	DoD	DoD NonPhys
1-Very Dissatisfied	6.9	7.7	7.6	7.5	4.0
	32.2	27.4	28.8	28.9	20.6
2 3	12.6	15.4	15.7	15.2	15.0
4	43.6	49.9	44.7	43.7	48.8
5-Very Satisfied	4.6	6.6	2.3	4.7	11.4
Number Responding	87	182	132	401	18,626
Source: Author					

In responding to a similar question concerning satisfaction with the current geographic assignment, medical officers' responses were similar to those of other officers. Both populations scored the upper half of the continuum more frequently than the lower or neutral areas.

TABLE 53
SATISFACTION WITH CURRENT LOCATION

1.1				
. • L	3.2	3.8 ·	3.0	4.4
L.5	9.7	8.3	10.4	13.8
₹.1	9.7	12.2	10.4	11.1
3.6	39.5	47.3	42.9	42.6
1.4	37.8	25.1	33.0	28.1
87	185	131	403	18,668
	9.1 3.6 1.4	9.1 9.7 3.6 39.5 4.4 37.8	9.1 9.7 12.2 3.6 39.5 47.3 4.4 37.8 25.1	9.1       9.7       12.2       10.4         3.6       39.5       47.3       42.9         4.4       37.8       25.1       33.0

Table 54 shows the expressed likelihood that the next assignment will be to an undesirable location. There were slight variations by service within the medical officer community, and medical officers varied slightly from other officers. Medical officers were more optimistic about the desirability of the next assignment location.

Table 55 shows responses to a question concerning the probability of the next promotion. The responses of medical officers were similar. The Navy physicians were slightly more positive about promotion potential.

Responses to a question concerning whether military life was as it was expected to be are shown in Table 56. Responses of medical officers were similar to those of others. The majority, 67.5 percent, responded in the affirmative.

TABLE 54

NEXT TOUR WILL BE AN UNDESIRABLE LOCATION

	Army	Navy	Air Force	DoD	DoD NonPhys
No Chance A Possibility Probable Sure/Certain	22.0 60.9 6.8 10.2	15.3 68.4 2.7 13.5	23.6 63.9 4.2 4.2	19.4 65.9 4.1 9.9	11.1 55.8 14.9 18.2
Number Responding Source: Author	59	111	72	242	6,702

TABLE 55
CHANCE OF PROMOTION TO NEXT PAY GRADE

	Army	Navy	Air Force	DoD
No Chance A Possibility Probable Sure/Certain	0.0 35.0 7.5 57.5	3.5 25.6 21.1 49.1	2.6 29.0 15.8 52.6	2.2 29.7 15.5 52.6
Number Responding Source: Author	40	57	38	135

TABLE 56
MILITARY LIFE IS AS EXPECTED

	Army	Navy	Air Force	DoD
Agree Neutral Disagree	69.0 14.5 16.4	68.8 12.9 21.2	68.3 13.8 18.3	67.5 13.5 19.0
Number Responding Source: Author	55	85	60	200

The last table in this section contains responses to the question: "Below are some reasons military personnel may have for leaving the armed forces. If you have considered leaving the service in the near future, please mark the three most important reasons why you would leave the service." Medical officers and other officers differed in their responses to this question. The three most frequently marked responses were the same for physicians and other officers; however, the percent of persons marking those reasons varied. These three reasons were: better civilian job opportunities, low pay and allowances, and reduction of military benefits. A higher percentage of medical officers marked these reasons. The fourth reason most frequently marked by medical officers was declining quality of military personnel, marked 22.8 percent of the time by physicians and 12.5 percent of the time by other officers. The fourth most frequently marked reason by other officers was family separations, marked by 19.3 percent of officers, and 6.9 percent of medical officers. The reasons marked by medical officers were less dispersed than those of other officers. There was some variation by service as can be seen in the table.

TABLE 57
REASON FOR LEAVING THE MILITARY SERVICE

_	Army	Navy	Air Force	DoD	DoD NonPhys
Btr Civ Job Opportunity	58.2	55.3	56.5	56.4	25.0
Low Pay and Allowances	52.7	37.6	48.4	45.0	14.8
Reduction Mil. Benefits	27.3	18.8	33.8	25.7	34.5
Declining Qlty Personnel	10.9	29.4	22.8	22.8	12.5
Frequent PCS Moves	14.5	18.8	6.5	13.9	7.0
Haven't Consrd Leaving	12.7	16.5	8.1	12.9	20.1
Not Enough Persnl Freedom	21.8	5.9	12.9	12.4	3.2
Location of Assignments	9.1	10.6	14.5	11.4	5.2
Personnel Policies	14.5	7.1	12.9	10.9	10.4
Not Able Pract Job Skills	10.9	10.6	8.1	9.9	6.4
Not Enough Oppor. Advance	14.5	4.7	8.1	8.4	11.8
Unreas Work Sched/Long Hrs	7.3	7.1	11.3	8.4	11.2
Separation from Family	3.6	12.9	1.6	6.9	19.3
Family Wants Out	5.5	3.5	3.2	4.0	3.3
Plan to Retire	0.0	7.1	3.2	4.0	17.4
Discrimination	1.8	3.5	1.6	2.5	1.7
Continue Education	3.6	2.4	0.0	2.0	3.9
Don't Like Job	0.0	2.4	1.6	1.5	3.4
Bored With Job	1.8	2.4	0.0	1.5	4.2
If Forced Out	1.8	0.0	3.2	1.5	7.2
Number Responding	55	85	62	202	6,702
Source: Author					

### G. PERCEPTION OF CIVILIAN PEER EMPLOYMENT

This group of variables shows some of the perceptions of medical officers concerning peer employment in the civilian community. The questions used here included variables concerning use of job skills, equipment, compensation, promotional opportunities, and supervisors. The questions were comparisons of civilian and military in the following areas:

- 1. Immediate Supervisors
- 2. Having Say
- Retirement Benefits
- 4. Medical Benefits
- 5. Chance for Interesting Work
- 6. Wage/Salary
- 7. Chance for Promotion
- 8. Training Opportunities
- 9. Schedule/Hours
- 10. Job Security
- 11. Equipment
- 12. Job Location
- 13. Compensation
- 14. Future Benefits
- 15. Wage Not Keeping Pace With Inflation
- 16. Family Better Off With Me in Civilian Job

The responses of medical officers were consistent, with only small variations by service. Medical officers showed a propensity for judging the military lower than the civilian sector in most areas, and for

grading the military lower than did other officers. Physicians did respond that the military was better in the area of work schedule/hours. In the area of salary, 91.5 percent of physicians felt that the civilian sector paid much better, while 61 percent of other offices responded in like manner.

TABLE 58
CIVILIAN VS. MILITARY--IMMEDIATE SUPERVISORS

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	27.8	29.3	35.6	30.8	14.5
Civ-Slightly Better	20.4	24.4	22.0	22.6	14.7
About the Same	50.0	41.5	42.4	44.1	56.5
Civ-Slightly Worse	1.9	4.9	0.0	2.6	11.7
Number Responding	54	82	59	195	9,246
Source: Author					

TABLE 59
CIVILIAN VS. MILITARY--HAVING SAY

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	64.8	57.6	72.9	64.1	30.2
Civ-Slightly Better	22.2	22.4	18.6	21.2	35.1
About the Same	11.1	16.5	6.8	12.1	25.4
Civ-Slightly Worse	1.9	2.4	1.7	2.0	7.8
Civ-Lot Worse	0.0	1.2	0.0	0.5	1.5
Number Responding	54	85	59	198	9,230
Source: Author					

TABLE 60
CIVILIAN VS. MILITARY--RETIREMENT BENEFITS

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	34.0	29.6	34.5	32.3	8.5
Civ-Slightly Better	18.9	17.3	15.5	17.2	15.0
About the Same	24.5	19.8	25.9	22.9	21.7
Civ-Slightly Worse	20.8	22.2	15.5	19.8	37.3
Civ-Lot Worse	1.9	11.1	8.6	7.8	18.9
Number Responding	53	81	58	192	9,215
Source: Author					

TABLE 61
CIVILIAN VS. MILITARY--MEDICAL BENEFITS

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse Civ-Lot Worse	14.8 13.0 42.6 24.1 5.6	11.9 16.7 36.9 22.6 11.9	20.4 13.0 42.6 18.5 5.6	15.1 14.6 40.1 21.9 8.3	16.5 16.4 20.8 27.0 19.3
Number Responding Source: Author	54	84	54	192	9,195

TABLE 62
CIVILIAN VS. MILITARY--CHANCE FOR INTERESTING WORK

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	18.5	23.8	39.7	27.0	20.4
Civ-Slightly Better	22.2	25.0	25.9	24.5	24.3
About the Same	51.9	39.3	31.0	40.3	38.5
Civ-Slightly Worse	7.4	9.5	3.4	7.1	9.6
Civ-Lot Worse	0.0	2.4	0.0	1.0	3.5
Number Responding	54	84	58	196	9,219
Source: Author					

TABLE 63
CIVILIAN VS. MILITARY--WAGE/SALARY

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse	68.5 22.2 9.3 0.0	82.4 7.1 8.2 2.4	81.7 13.3 3.3 1.7	78.4 13.1 7.0 1.5	31.0 29.8 20.4 15.3
Number Responding Source: Author	54	85	60	199	9,230

TABLE 64
CIVILIAN VS. MILITARY--CHANCE FOR PROMOTION

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	32.7	29.6	34.5	31.9	24.5
Civ-Slightly Better	21.2	22.2	25.9	23.0	31.5
About the Same	44.2	39.5	37.9	4.7	32.7
Civ-Slightly Worse	1.9	8.6	1.7	4.7	9.4
Number Responding	52	81	58	191	9,222
Source: Author					

TABLE 65
CIVILIAN VS. MILITARY--TRAINING OPPORTUNITIES

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse Civ-Lot Worse	27.8 22.2 33.3 14.8 1.9	27.4 28.6 32.1 11.9 0.0	33.9 23.7 30.5 11.9 0.0	29.4 25.4 32.0 12.7 0.5	13.7 24.7 58.3 15.2 3.3
Number Responding Source: Author	54	84	59	197	9,238

TABLE 66
CIVILIAN VS. MILITARY--SCHEDULE/HOURS

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	14.8	12.9	22.0	16.2	37.8
Civ-Slightly Better	11.1	14.1	20.3	15.2	29.2
About the Same	46.3	37.6	25.4	36.4	25.8
Civ-Slightly Worse	22.2	21.2	27.1	23.2	6.0
Civ-Lot Worse	5.6	14.1	5.1	9.1	1.3
Number Responding	54	85	59	198	9,245
Source: Author					

TABLE 67
CIVILIAN VS. MILITARY--JOB SECURITY

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better	11.1	16.5	17.5	15.3	6.3
Civ-Slightly Better	14.8	9.4	15.8	12.8	8.3
About the Same	51.9	49.4	54.4	51.5	32.3
Civ- Slightly Worse	22.2	20.0	12.3	18.4	40.1
Civ-Lot Worse	0.0	4.7	0.0	2.0	13.1
Number Responding	54	85	57	196	9,224
Source: Author					

TABLE 68
CIVILIAN VS. MILITARY--EQUIPMENT

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse	44.4 33.3 22.2 0.0	44.0 33.3 17.9 4.8	54.2 27.1 18.6 0.0	47.2 31.5 19.3 2.0	30.1 28.2 36.8 4.0
Number Responding Source: Author	54	84	59	197	9,230

TABLE 69
CIVILIAN VS. MILITARY--JOB LOCATION

	Army	Navy	Air Force	DoD	DoD NonPhys
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse Civ-Lot Worse	37.0 25.9 33.3 3.7 0.0	37.6 21.2 35.3 4.7 1.2	40.0 31.7 26.7 0.0 1.7	38.2 25.6 32.2 3.0 1.0	33.2 27.1 36.4 2.6 0.7
Number Responding	54	85	60	199	9,246
Source: Author					

TABLE 70
CIVILIAN VS. MILITARY--COMPENSATION

	Army	Navy	Air Force	DoD	DoD NonPhys
Lot More in Military	1.8	5.9	6.6	5.0	11.2
Ltl More in Military	9.1	2.4	1.6	4.0	21.4
About the Same	7.3	8.2	13.1	9.5	17.7
Ltl More in Civilian	16.4	17.6	19.7	17.9	24.3
Lot More in Civilian	63.6	65.9	55.7	62.2	22.4
No Idea	1.8	0.0	3.3	1.5	2.9
Number Responding	55	85	61	201	9,332
Source: Author					

TABLE 71

FUTURE MILITARY PERSONNEL WILL NOT HAVE AS GOOD MILITARY BENEFITS

	Army	Navy	Air Force	DoD	DoD NonPhys
Agree Neutral Disagree	63.2 25.5 7.3	63.5 24.7 11.8	68.3 23.3 8.3	66.0 24.5 9.5	84.4 12.2 5.7
Number Responding Source: Author	55	85	60	200	9,361

TABLE 72

MY MILITARY PAY AND BENEFITS DO NOT KEEP UP WITH INFLATION

	Army	Navy	Air Force	DoD	DoD NonPhys
Agree Neutral Disagree	80.0 7.3 12.7	88.3 7.1 4.7	88.5 8.2 3.3	86.0 7.5 6.5	89.5 5.3 5.2
Number Responding	55	85	61	201	9,361
Source: Author					

TABLE 73

MY FAMILY BETTER OFF WITH ME IN CIVILIAN JOB

	Army	Navy	Air Force	DoD	DoD NonPhys
Agree Neutral Disagree	65.4 25.5 9.1	57.7 32.9 9.5	60.0 31.7 8.4	60.5 30.5 9.0	49.7 34.4 15.9
Number Responding Source: Author	55	85	60	200	9,276

## H. CAREER INTENTION

Table 74 through Table 76 show medical officers responses to questions which reflected career intent. The variables shown here are:

- 1. Final Rank Expected
- 2. Future Plans for National Guard/Reserves
- 3. Years of Service Intended

Final rank expected and years of service are directly correlated as final rank expected can be a direct measure of years of service intended.

Table 75 shows approximately 25.4 percent of physicians expressed a positive intent to affiliate with the reserves or national guard forces.

TABLE 74
FINAL RANK EXPECTED

	Army	Navy	Air Force	DoD	DoD NonPhys
03	8.2	14.0	6.3	10.3	12.5
04	24.7	23.8	21.4	23.2	14.6
05	18.8	15.1	19.0	17.1	40.1
06	40.0	39.4	45.2	41.4	28.1
07-010	8.2	7.5	8.0	7.2	4.6
Number Responding	85	185	126	396	9,276
Source: Author	03	100	120	330	3,270

TABLE 75

FUTURE PLANS FOR NATIONAL GUARD/RESERVES SERVICE

	Army	Navy	Air Force	DoD	DoD NonPhys
Yes	3.6	8.3	3.2	5.5	6.1
Probably	10.9	22.9	22.6	16.9	16.3
Probably Not	23.6	22.6	22.6	22.9	23.0
No	40.0	21.4	33.9	30.3	41.2
Don't Know	21.8	25.0	17.7	21.9	13.4
Number Responding	55	84	62	201	9,397
Source: Author					

Table 76 shows the physicians' expressed intent to remain in the military for a number of years. There were variations by service. Navy physicians expressed the intent to remain twenty or more years more frequently than did Army or Air Force medical officers. Physicians

expressed this same intent less frequently than did other officers, 49.9 percent and 75.1 percent, respectively.

TABLE 76
YEARS OF SERVICE INTENDED

	Army	Navy	Air Force	DoD	DoD NonPhys
1 to 10 Years 11 to 19 Years 20 Years Over 20 Years	42.7 11.0 28.0 19.5	42.1 7.1 32.2 18.6	39.7 14.9 34.7 10.7	41.5 11.0 31.6 16.3	22.2 2.8 37.8 37.3
Number Responding Source: Author	82	183	121	386	18,412

Medical department folklore has traditionally and strongly posited that medical officers are a unique population unlike any other military officer community. The contents of this section appear to indicate that the folklore contains some elements of truth.

Physicians are similar to other military officers in the problems they encounter in military life. For example, they face many of the difficulties when relocating because of permanent change of station orders as other officers do. They share the attitudes towards women and minority groups in the military service expressed by other officers.

However, in some fundamental socioeconomic and personal areas, medical officers demonstrated a propensity for being different from other officers. They were older when entering the military service, because of time spent in medical school. A likely related fact was that more medical officers were married both at service entry, and at various points in the first few years of their military service. The parents

and spouses of medical officers were more educated than those of other officers, perhaps reflecting the impact of other socioeconomic variables. Medical officers tended to have longer periods of obligated service at various points in their military careers than other officers, reflecting the effect of scholarship and residency or fellowship training incurred obligations.

Medical officers had higher income expectations than other officers, likely as a result of the economic rewards our society bestows upon physicians. Perhaps, because of this, fewer medical officers anticipated a military career, and as a group, they appeared to be more dissatisfied with military life than were the other officers.

The "uniqueness" of the medical officer community may be the result of obvious socioeconomic and personal variables. However, the impact of specific variables was not intended to be determined here. The various elements of the socioeconomic and personal variables discussed here will be examined in the next section.

# IV. ANALYSIS OF SOCIOECONOMIC AND PERSONAL VARIABLES

This section presents the results of analysis of the socioeconomic and personal variables impacting upon physician retention using multiple regression and discriminant analysis. The specific segment of the population examined was male, Caucasian medical officers with four to ten years of service. Because of sample size limitations, the results of this section should be viewed as tentative. The sample size was reduced to 48 for Form 3 and 55 for Form 4 of the survey. Years of service intended was used to form two groups for discriminant analysis. The groups were careerist and noncareerist. As previously defined, careerists were those who expressed the intent to remain in the military service for twenty or more years. Noncareerists were those who planned to depart the military service prior to completion of retirement eligibility.

Initially, a correlation matrix was developed for all variables.

The independent variables which demonstrated the highest correlation with the criterion were used for multiple regression and discriminant analysis. The six variables which correlated most highly with career intent were selected from each officer form used in the Rand survey. A full discussion of the variables used in this chapter can be found in Appendix C.

### A. FORM 3 ANALYSIS

The six variables from Form 3 having the highest correlation with career intent are presented in Table 77 along with their respective correlation with career intent.

TABLE 77

CORRELATIONS FOR SELECTED FORM 3 VARIABLES

redictor Variable	Career Intention
atisfaction With Military Life	.59
iv. vs. MilChance for Interesting Work	.71
iv. vs. MilPeople Worked With	.50
iv. vs. MilJob Location	.52
iv. vs. MilChance for Promotion	.56
My Family Better Off With Me In Civ. Job	.61

# B. FORM 3 MULTIPLE REGRESSION

The multiple regression summary table for Form 3 is presented in Table 78. The six variables explained approximately 48 percent of the variance in years of service intended.

TABLE 78

CONDENSED REGRESSION SUMMARY

Independent Variable	Multiple R	R-Squared	Simple R	F Value
Satisfaction With Military Life	.590	.349	.590	22.482
Civ. vs. MilChance Inter. Work	.658	.433	.468	15.663
Civ. vs. MilPeople Worked With	.682	.466	.423	11.623
Civ. vs. MilJob Location	.690	.476	.293	3.862
Civ. vs. MilChance Promotion	.693	.480	.320	7.033
Family Better Off Me In Civ. Job	.694	.481	.368	5.725

## C. FORM 3 DISCRIMINANT ANALYSIS

The results of the discriminant analysis on these same six variables are shown below. Only three of the variables entered the equation.

These were: satisfaction with military life, civilian vs. military-chance for interesting work, and civilian vs. military-people worked with. The reader should recall that the criterion was years of service intended.

The standardized canonical discriminant function coefficients for these three variables were:

Satisfaction With Military Life .701

Civ. vs. Mil.--Chance for Interesting Work .480

Civ. vs. Mil.--People Worked With .356

Using these three variables for predicting careerist intention, 77.8 percent of the physicians could be correctly classified by the discriminant analysis program. In the two groups, 75 percent of noncareerists and 82.4 percent of careerists were accurately classified. Approximately 40 percent of the survey respondents had indicated that they were careerists.

### D. FORM 4 ANALYSIS

The variables from Form 4 having the highest correlation with career intent are presented in Table 79 along with their respective correlation with career intent.

TABLE 79

CORRELATIONS FOR SELECTED FORM 4 VARIABLES

Predictor Variable	Career Intention
Satisfaction With Military Life	.53
Feelings About Current Location	.39
No Obligated Service Remaining	.44
PCS ProblemFinding Off-duty Employment	.31
Commissioning SourceHPSP	.36
Age When Entered the Service	.28
Source: Author	

# E. FORM 4 MULTIPLE REGRESSION

The six variables used in multiple regression analysis of the Form 4 variable explained approximately 46 percent of the variance in the criterion for this sample from the survey.

TABLE 80

CONDENSED REGRESSION SUMMARY TABLE

Dependent Variable = Years of Service Intended						
Independent Variable	Multiple R	R-Squared	Simple R	F Value		
Satisfaction With Military Life Feelings About Current Location No Remaining Obligated Service PCS Prob/Finding Off-dty Employ. HPSP Age When Entered Service	.543 .607 .653 .667 .676	.294 .368 .427 .445 .457	.543 .357 .476 .276 .268 .248	20.451 13.990 11.675 9.226 7.562 6.193		
Source: Author						

## F. FORM 4 DISCRIMINANT ANALYSIS RESULTS

The standardized canonical discriminant function coefficients for Form 4 variable were:

Satisfaction With Military Life	.588
Feelings About Current Location	.452
No Obligated Service Remaining	.491
PCS ProblemFinding Off-duty Employment	.270

The Commissioning Source Health Professional Scholarship Program (HPSP) and Age When Entered the Service variables failed to enter the analysis. In predicting career intentions, 80.39 percent of the physicians were correctly classified: 85 percent of the noncareerists, and 75 percent of the careerists.

The results of these analyses should be interpreted with caution. The sample sizes were reduced to 48 in Form 3 and 55 in Form 4 by the delimiting variable restrictions, i.e., male Caucasians with four to ten years of military service. The implications of the findings are apparent. General satisfaction with military life and perceptions of the comparative job content in the civilian market are highly associated with military physicians' career decisions. For both forms, over half of the variance in career intent can be explained by individual variation in satisfaction with military life. Economic compensation appears to be extremely important to both careerists and noncareerists, but is perhaps what Hertzberg would term a "dissatisfier" rather than a motivator. It seems that the intrinsic elements of the military career are reported as having the more positive impact upon the decision to become a careerist.

## V. CONCLUSIONS

The medical officers who responded to the survey used in this thesis appeared to have been representative of the medical corps community. Those responding to the survey constituted approximately 4 percent of the Department of Defense physician community. The sample for each survey form constituted approximately two percent of the medical corps population within the Department of Defense. Unfortunately, once the target population was selected for the analysis in Section IV, the sample was reduced to less than 2 percent of the population. Therefore, caution should be used when examining possible conclusions to be drawn from this analysis.

Section III demonstrated possible images which the active duty medical officers have of themselves, their roles as physicians in the military service, and of the military way of life. These images vary slightly among services in some areas, and differ from that of other officers in the armed forces.

Most medical officers appear to feel that they are inadequately compensated for their efforts, and would have greater potential for economic gain as civilian physicians. The responses to the survey appear to imply dissatisfaction with both military salary and benefits.

In addition to economic opportunity, there are other variables which seem to be a tremendous source of dissatisfaction among medical officers. These include frequency of permanent transfers, and the factors inherent in changing one's environment. The stress involved in

the family's adjustment to a new environment and altered life styles appear to be sources of frustration for the military physician.

Many physicians appeared to have negative impressions of their job environment when comparing it to similar jobs in the civilian sector. In some areas, these perceptions may be influenced by lack of experience in the civilian job market, since the majority of physicians enter the military shortly after completing medical school. The propensity to give the civilian medical practice higher marks appears to be a factor which can create dissatisfaction with the military.

Those variables which were said to have an influence upon career decisions had to do with the job environment. Satisfaction with military life appeared to have been a composite measurement of all variables, but especially those which were related to positive feelings about the job and social aspects of the military way of life.

If retention goals are to be met, this analysis implies that not only must satisfaction of economic requirements be met, but attention must be directed towards the environment in which the physician works. The implication is that the medical officer will depart military employment quickly because of what he perceives as inadequate compensation, and that he will remain when satisfied with compensation only if the job environment and other factors of military life satisfy his other needs.

An additional implication of the findings of this thesis is that a survey with questions specifically designed to evaluate medical officers' career decisions would be valuable. Examination of the following questions would provide areas for further study.

1. What are the effects of variable incentive pay upon physician retention?

- 2. Would reduction of permanent changes of station transfers increase retention?
- 3. What is the effect of commissioning source upon the career decision?
- 4. What are the effects of the peer group and ancillary support personnel upon physician retention?
- 5. Why do physicians appear to have the propensity to consistently evaluate all aspects of the military work environment more negatively than the civilian counterpart?

Another analysis which would be fruitful is an examination of the variable, satisfaction with military life. The various elements which constitute this variable may provide greater insight into the career behavior of medical officers. The compensation, job, and family-oriented facets could be examined to determine the extent to which they contribute to satisfaction with military life, and how they are linked to career decisions.

# APPENDIX A TABLES OF VARIABLES PERTAINING TO OFFICERS OTHER THAN MEDICAL OFFICERS

This Appendix provides the tables of variables pertaining to officers other than medical officers. These tables were created from the same data set as tables for medical officers. All tables are in percentages. They are numbered in correlation with the medical officer tables in the text of this thesis (i.e., Table A-5 is like Table 5, etc.).

TABLE A-5
SEX DISTRIBUTION

	Army	Navy	Marine	Air Force	DoD
Male Female	84.8 15.2	82.9 17.1	97.7 2.3	82.6 17.4	86.7 13.3
Number Respon.	2,870	3,934	3,290	3,677	13,771
Source: Author					

TABLE A-6

RACE

	Army	Navy	Marine	Air Force	DoD
Black	1.1	1.4	2.2	3.4	2.9
AmerInd/Alas	0.4	0.2	0.4	0.2	0.3
Hispanic	1.1	0.6	0.7	0.9	0.8
Asian	1.3	1.0	0.2	1.0	0.9
Caucasian	90.5	95.0	94.9	92.7	93.4
Other .	1.4	1.8	1.5	1.8	1.6
Number Respon.	2,873	3,924	3,290	3,670	13,757

TABLE A-7
AGE AT ENTRY INTO MILITARY SERVICE

	Army	Navy	Marine	Air Force	DoD
17 to 20 Years	28.2	38.1	40.0	22.7	32.4
21 to 24 Years	57.2	48.7	57.0	64.1	56.6
25 to 28 Years	11.2	10.1	3.0	9.4	8.5
29 to 32 Years	2.5	2.0	0.1	2.2	1.7
33 to 51 Years	1.0	1.1	0.0	1.5	0.9
Number Respon.	2,879	3,941	3,297	3,689	13,806

Origin: Author

TABLE A-10

MARITAL STATUS AT SERVICE ENTRY

Army	Navy	Marine	Air Force	DoD
28.5	15.3	19.9	28.3	22.6
1.5	1.2	0.7	1.5	1.2
70.0	83.6	79.4	70.1	76.2
1,989	2,676	2,249	2,435	9,349
	28.5 1.5 70.0	28.5 15.3 1.5 1.2 70.0 83.6	28.5 15.3 19.9 1.5 1.2 0.7 70.0 83.6 79.4	28.5 15.3 19.9 28.3 1.5 1.2 0.7 1.5 70.0 83.6 79.4 70.1

TABLE A-11
CURRENT MARITAL STATUS

	Army	Navy	Marine	Air Force	DoD
Married Widowed/Divorced/ Separated	75.6 5.0	70.3 4.5	77.5 6.8	76.6 5.7	74.8 5.4
Single/Nvr Married	19.5	25.1	15.7	17.8	19.7
Number Respon.	1,988	2,674	2,248	2,433	9,343
Source: Author					

TABLE A-14

EDUCATION OF SPOUSE

	Army	Navy	Marine	Air Force	DoD
11th Grade/Less	16.8	21.6	12.7	19.8	18.0
12th Grade/GED	16.0	15.6	20.1	18.1	17.4
1-2 Years College	20.4	20.8	24.4	22.2	22.0
3-4 Years College	31.1	29.2	32.1	27.3	29.8
5-6 Years College	12.5	10.5	9.9	11.2	10.9
7 or More Yrs Col.	3.1	2.3	0.8	1.5	1.9
Number Respon.	2,879	3,941	3,297	3,689	13,806

TABLE A-15
FATHERS' EDUCATION

	Army	Navy	Marine	Air Force	DoD
11th Grade/Less	26.2	23.2	27.1	27.9	26.0
12th Grade/GED	31.3	29.2	32.1	32.6	31.2
1-2 Years College	12.5	13.3	12.8	14.5	13.3
3-4 Years College	15.4	19.9	16.8	14.5	16.8
5 or More Yrs Col.	14.6	14.4	11.2	10.5	12.7
Number Respon.	1,824	2,473	2,019	2,227	8,543
Source: Author					

TABLE A-16

MOTHERS' EDUCATION

	Army	Navy	Marine	Air Force	DoD
11th Grade/Less	19.4	15.0	19.2	20.2	18.3
12th Grade/GED	42.8	45.2	47.4	46.5	45.5
1-2 Years College	16.5	17.3	15.4	15.5	16.2
3-4 Years College	15.5	17.0	13.3	12.9	14.8
5 or More Yrs Col.	5.8	5.5	4.7	4.9	5.2
Number Respon.	1,830	2,479	2,028	2,233	8,570

Source: Author

TABLE A-17

NUMBER OF IMMEDIATE FAMILY WHO HAD SERVED IN THE MILITARY

	Army	Navy	Marine	Air Force	DoD
None	25.9	23.6	25.3	28.2	25.7
0ne	43.7	45.8	42.9	42.9	43.9
Two	20.2	20.3	21.0	19.8	20.3
Three or More	10.2	10.3	10.8	9.1	10.1
Number Respon.	1,979	2,659	2,237	2,419	9,294

TABLE A-19
RANK

	Army	Navy	Marine	Air Force	DoD
03	36.9	37.6	40.8	39.8	38.8
04	33.1	31.1	33.5	32.4	32.5
05	21.0	20.2	18.1	20.7	20.0
06	9.0	11.1	7.6	7.1	8.8
Number Respon.	2,879	3,941	3,297	3,689	13,806
Source: Author					

TABLE A-20
YEARS OF SERVICE

	Army	Navy	Marine	Air Force	DoD
0 TO 4 Years	10.1	11.3	2.9	12.1	9.2
5 to 8 Years	17.8	17.4	18.5	16.5	17.5
9 to 12 Years	17.8	18.7	21.9	16.8	18.8
13 to 16 Years	23.8	14.8	15.9	20.7	18.5
17 to 20 Years	18.1	18.0	20.0	20.5	19.2
21 or More Years	12.4	19.8	20.7	13.4	16.8
Number Respon.	2,879	3,941	3,297	3,689	13,806

TABLE A-21
SOURCE OF ENTRY

	Army	Navy	Marine	Air Force	DoD
Academy Graduate	9.6	18.2	8.3	7.7	11.2
LDO Program	0.1	3.0	5.4	0.1	2.2
OCS/OTS	18.2	22.0	32.4	29.6	25.7
ROTC-Reg	38.6	6.6	6.1	31.0	19.9
ROTC-Scholarship	5.1	4.9	5.3	4.9	5.0
Avia OC/CAD	0.2	15.4	7.8	8.3	8.5
WO Program	0.0	0.5	1.2	0.0	0.4
Direct Appt.	15.4	11.6	0.4	15.6	10.9
Reserve OC	0.8	2.7	0.5	0.4	1.2
Pitn Ldrs Crs	0.0	0.1	26.9	0.0	6.4
Other .	6.5	9.7	5.7	1.3	5.8
Number Respon.	2,871	3,899	3,248	3,674	13,701
Source: Author					

TABLE A-22
STATUS OF INITIAL OBLIGATED SERVICE (ALL DOD)

Years of Service	Yes	No
0 to 1 2 Years 3 Years 4 Years 5 Years 6 Years 7 Years 8 Years 9 Years 10 Years 0ver 10	9.0 5.7 3.7 2.4 1.7 1.3 1.0 0.9 0.4 0.3 1.1	0.5 0.9 1.4 2.6 2.8 3.3 2.8 2.8 3.4 3.5 42.8
Number Respon. Source: Author		8,953

TABLE A-23
REMAINING OBLIGATED SERVICE (ALL DOD)

Years of Service	Less than 2 Years	2 or More Years	No Obligation
O TO 2 Years	5.0	8.8	0.8
3 to 6 Years	8.3	5.1	6.3
7 to 10 Years	3.5	2.9	9.3
Over 10 Years	6.2	4.2	38.5
Number Respon.	9,066		

TABLE A-27
PERMANENT CHANGE OF STATION PROBLEMS

_	Army	Navy	Marine	Air Force	DoD
Adj. Higher Cost/living	61.7	63.0	58.6	57.9	59.6
Moving/Est. New Hsehld.	79.1	79.8	78.1	79.4	79.1
Paying Unreim. Mvg. Exp.	61.3	56.3	38.3	58.9	58.3
Finding Off-duty Employ.	10.0	8.6	4.8	8.7	7.0
Continuing Education	47.0	39.2	39.6	36.0	40.1
Finding Perm. Housing	50.6	54.7	52.7	52.0	52.6
Finding Shop/Rec Facil.	31.2	23.5	27.5	30.4	28.0
Child Adj. to New Envmt.	47.0	46.8	46.1	48.3	47.1
Spouse Adj. to New Envmt.	49.2	48.9	47.8	51.6	49.5
Self Adj. to New Envmt.	36.1	33.4	29.4	36.0	33.8
Number Respon.	1,906	2,519	2,113	2,349	8,887

Source: Author

TABLE A-41
TOTAL FAMILY INCOME IN 1978

	Army	Navy	Marine	Air Force	DoD
0 to \$15,000	20.2	21.5	18.6	17.4	19.5
\$15,001 to \$25,000 \$25,001 to \$35,000	41.1 26.1	37.3 27.6	40.8 28.7	41.2 28.9	40.0 27.9
\$35,001 to \$45,000 Over \$45,000	9.3 3.1	9.9 3.4	9.4 2.5	9.9 2.5	9.6 2.9
·	•				
Number Respon.	3,580	5,020	4,191	4,438	17,229
Source: Author					

TABLE A-42
REPORTED MONTHLY BASIC PAY

	Army	Navy	Marine	Air Force	DoD
\$580 to \$1,499 \$1,500 to \$1,999 \$2,000 to \$4,500	27.5 42.2 30.3	29.6 40.9 29.2	21.3 51.2 27.5	28.9 41.5 29.5	27.0 43.8 29.1
Number Respon. Source: Author	1,385	1,933	1,641	1,775	6,734

TABLE A-45
VALUE OF GIVEN ASSETS

			<del></del>		DoD
None	1.0	1.1	1.1	1.3	1.1
\$1 to \$499	5.6	8.3	6.9	4.9	6.5
\$500 to \$1,999	13.6	14.9	18.0	13.7	15.1
\$2,000 to \$4,999	20.8	18.8	21.3	20.1	20.1
\$5,000 to \$9,999	19.2	18.3	19.1	18.9	18.8
\$10,000 to \$14,999	12.9	11.6	10.9	11.3	11.5
Over \$15,000	27.9	26.6	22.7	29.9	26.8
Number Respon.	1,387	1,944	1,636	1,774	6,741

TABLE A-46
TOTAL OUTSTANDING DEBTS

	Army	Navy	Marine	Air Force	DoD
None	18.8	20.1	15.3	20.3	18.7
\$1 to \$499	10.7	11.0	8.8	10.2	10.2
\$500 to \$1,999	17.3	17.4	16.4	16.4	16.9
\$2,000 to \$4,999	25.2	23.4	27.4	23.7	24.8
\$5,000 to \$9,999	18.1	17.4	19.6	18.8	18.4
\$10,000 to \$14,999	5.4	5.7	6.7	5.6	5.9
Over \$15,000	4.5	5.0	5.8	4.9	5.1
Number Respon.	1,917	2,697	2,253	2,403	9,270
Source: Author					

TABLE A-47
YEAR PURCHASED MAIN HOME

	Army	Navy	Marine	Air Force	DoD
Not Applicable	47.2	30.2	34.6	37.1	36.6
1965 to 1970	3.7	4.1	4.2	1.7	3.4
1971 to 1975	12.5	20.1	16.3	14.2	16.1
1976 to 1979	36.6	45.7	44.9	47.0	44.0
Number Respon.	1,419	1,984	1,673	1,837	6,913
Source: Author					

TABLE A-48
PURCHASE PRICE OF MAIN HOME

	Army	Navy	Marine	Air Force	DoD
\$0 to \$39,999	29.9	20.2	27.5	25.6	25.1
\$40,000 to \$59,999	37.6	38.2	36.9	45.2	39.6
\$60,000 to \$79,999	24.8	27.2	23.8	21.5	24.4
\$80,000 to \$99,999	5.6	9.3	8.9	5.1	7.5
Over \$100,000	2.1	5.1	2.8	2.6	3.4
Number Respon.	747	1,382	1,091	1,137	4,357
Source: Author					

TABLE A-49
MORTGAGE PAYMENT ON MAIN HOME

	Army	Navy	Marine	Air Force	DoD
\$0 to \$399	44.2	37.3	44.3	44.8	42.2
\$400 to \$499	25.3	27.0	20.5	26.3	24.9
\$500 to \$599	15.5	17.1	18.1	17.0	17.0
\$600 to \$699	9.3	11.2	9.5	7.6	9.5
\$700 to \$799	4.1	4.4	5.6	2.5	4.1
Over \$800	1.6	3.0	2.0	1.8	2.2
Number Respon.	740	1,387	1,096	1,149	4,372
Source: Author					

TABLE A-50
FINANCIAL SITUATION NOW VS. THREE YEARS AGO

	Army	Navy	Marine	Air Force	DoD
Lot Better Now	20.8	20.3	17.4	19.2	19.4
Somewhat Better Now	28.2	31.9	28.5	30.8	30.0
About the Same	22.3	19.8	23.8	18.9	21.1
Somewhat Worse Now	20.8	20.8	21.4	21.2	21.0
Lot Worse Now	7.9	7.3	8.9	9.8	8.5
Number Respon.	1,410	1,969	1,658	1,822	6,859
Source: Author					

TABLE A-51

EXPECTED CIVILIAN EARNINGS PER YEAR

	Army	Navy	Marine	Air Force	DoD
\$0 to \$39,999	89.9	88.2	94.5	88.1	90.0
\$40,000 to \$49,999	4.9	6.1	4.2	6.9	5.6
\$50,000 to \$59,999	2.0	2.7	1.0	2.0	2.0
\$60,000 to \$69,999	0.9	1.2	0.1	0.9	0.9
\$70,000 to \$79,999	1.3	0.7	0.1	0.9	0.7
\$80,000 to \$89,999	0.4	0.6	0.0	0.3	0 3
Over \$90,000	0.6	0.6	0.1	0.6	0.5
Number Respon.	1,226	1,732	1,445	1,581	5,984
Source: Author					

TABLE A-52
SATISFACTION WITH MILITARY LIFE

	Army	Navy	Marine	Air Force	DoD	
1-Very Dissatisfied	5.1	3.8	3.4	4.0	4.0	
2	19.9	22.0	16.9	23.0	20.6	
3	14.6	15.8	13.9	15.8	15.0	
4	48.9	47.8	50.8	48.3	48.8	
5-Very Satisfied	11.5	10.7	15.0	8.9	11.4	
Number Respon.	3,903	5,363	4,514	4,846	18,626	
Source: Author						

TABLE A-53
FEELINGS ABOUT CURRENT LOCATION

- 1				
5.1	3.4	5.5	4.2	4.4
13.9	12.7	13.3	15.3	13.8
12.0	10.3	11.6	10.4	11.1
41.2	39.4	40.1	43.6	42.6
27.2	29.0	29.9	26.3	28.1
3,919	5,372	4,517	4,860	18,668
	12.0 41.2 27.2	12.0 10.3 41.2 39.4 27.2 29.0	12.0 10.3 11.6 41.2 39.4 40.1 27.2 29.0 29.9	12.0     10.3     11.6     10.4       41.2     39.4     40.1     43.6       27.2     29.0     29.9     26.3

TABLE A-54

NEXT TOUR WILL BE AN UNDESTRABLE LOCATION

	Army	Navy	Marine	Air Force	DoD
No Chance A Possibility Probable Sure/Certain	14.1 54.5 16.4 15.0	10.7 62.9 13.6 12.8	10.9 45.1 14.3 29.7	9.3 59.5 16.0 15.2	11.1 55.8 14.9 18.2
Number Respon. Source: Author	1,411	1,883	1,716	1,692	6,702

TABLE A-57
REASON FOR LEAVING THE MILITARY SERVICE

	Army	Navy	Marine	Air Force	DoD
Btr Civ Job Opportunity	26.6	25.3	25.3	22.8	25.0
Low Pay and Allowances	13.2	17.9	13.9	13.6	14.8
Reduction Mil. Benefits	30.8	32.0	39.9	35.2	34.5
Declining Qlty Personnel	17.7	11.8	13.2	8.6	12.5
Frequent PCS Moves	7.9	7.6	5.7	7.0	7.0
Haven't Consrd Leaving	22.5	17.8	22.3	18.3	20.1
Not Enough Persnl Freedom	3.6	3.4	4.3	1.5	3.2
Location of Assignments	4.2	4.9	5.7	6.0	5.2
Personnel Policies	10.1	8.0	13.8	9.9	10.4
Not Able Pract Job Skills	5.5	7.0	6.2	6.5	6.4
Not Enough Oppor. Advance	13.6	8.1	15.6	10.5	11.8
Unreas Work Sched/Long Hrs	10.4	13.7	11.5	8.4	11.2
Separation from Family	11.1	35.3	15.9	37.7	19.3
Family Wants Out	4.8	3.7	2.6	2.3	3.3
Plan to Retire	15.6	18.6	16.3	18.6	17.4
Discrimination	2.3	1.7	1.9	0.9	1.7
Continue Education	4.1	4.9	3.7	3.0	3.9
Don't Like Job	3.3	3.8	3.6	3.0	3.4
Bored With Job	4.3	4.4	3.7	4.6	4.2
If Forced Out	8.1	5.5	9.4	6.2	7.2
Number Respon.	1,929	1,883	1,716	1,692	6,702
Source: Author					

TABLE A-58

CIVILIAN VS. MILITARY--IMMEDIATE SUPERVISORS

2 13.8 9 14.4		16.1	14 -
6 57.6 5 11.9 8 2.2	6 54.2 9 15.3	16.3 56.5 9.9 1.2	14.5 14.7 56.5 11.7 2.6
8 2,680	2,249	2,409	9,246
	8 2,680	8 2,680 2,249	8 2,680 2,249 2,409

TABLE A-59
CIVILIAN VS. MILITARY--HAVING SAY

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	31.6	28.5	25.7	35.3	30.2
Civ-Slightly Better	30.8	36.1	36.3	36.3	35.1
About the Same	27.9	25.5	26.6	21.9	25.4
Civ-Slightly Worse	8.3	8.6	8.6	5.8	7.8
Civ-Lot Worse	1.4	1.2	2.8	0.6	1.5
Number Respon.	1,906	2,683	2,248	2,401	9,230
Source: Author					

TABLE A-60
CIVILIAN VS. MILITARY--RETIREMENT BENEFITS

	Army	Navy	Marine	Air Force	DoO
Civ-Lot Better Civ-Slightly Better About the Same Civ-Slightly Worse Civ-Lot Worse	7.4 14.9 21.9 36.5 19.2	8.5 13.8 21.4 35.7 20.7	10.2 17.2 22.0 33.4 17.2	7.9 14.6 21.3 37.3 18.5	8.5 15.0 21.7 37.3 18.9
Number Respon. Source: Author	1,901	2,669	2,240	2,405	9,215

TABLE A-61
CIVILIAN VS. MILITARY--MEDICAL BENEFITS

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	12.0	16.3	22.2	14.9	16.5
Civ-Slightly Better	13.0	16.4	19.3	16.5	16.4
About the Same	22.1	20.9	18.7	21.6	20.8
Civ-Slightly Worse	30.9	27.3	21.8	28.5	27.0
Civ-Lot Worse	22.0	19.2	18.0	18.5	19.3
Number Respon.	1,895	2,672	2,235	2,393	9,195
Source: Author					

TABLE A-62
CIVILIAN VS. MILITARY--CHANCE FOR INTERESTING WORK

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	22.8	18.0	18.9	22.5	20.4
Civ-Slightly Better	21.7	23.1	24.8	27.3	24.3
About the Same	40.2	39.6	35.8	38.4	38.5
Civ-Slightly Worse	12.3	15.7	15.2	15.2	9.6
Civ-Lot Worse	2.9	3.6	5.3	2.0	3.5
Number Respon.	1,901	2,680	2,232	2,406	9,219
Source: Author					

TABLE A-63
CIVILIAN VS. MILITARY--WAGE/SALARY

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	30.4	31.4	30.4	31.5	31.0
Civ-Slightly Better	27.9	30.1	32.3	28.6	29.8
About the Same	21.0	18.9	20.5	21.4	20.4
Civ-Slightly Worse	16.1	15.2	14.5	15.4	15.3
Cov-Lot Worse	4.7	4.4	2.4	3.1	3.6
Number Respon.	1,904	2,685	2,234	2,407	9,230
Source: Author					

TABLE A-64
CIVILIAN VS. MILITARY--CHANCE FOR PROMOTION

•	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	25.7	19.6	26.7	26.9	24.5
Civ-Slightly Better	30.1	30.0	32.8	33.2	31.5
About the Same	31.9	35.6	32.8	30.0	32.7
Civ-Slightly Worse	9.9	12.6	6.6	8.3	9.4
Civ-Lot Worse	2.5	2.3	1.2	1.6	1.9
Number Respon.	1,902	2,677	2,235	2,408	9,222
Source: Author	1,502	2,077	2,233	2,400	3,66

TABLE A-65
CIVILIAN VS. MILITARY--TRAINING OPPORTUNITIES

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	14.9	11.3	17.1	12.2	13.7
Civ-Slightly Better	24.8	24.7	28.6	21.1	24.7
About the Same	39.2	41.9	39.5	47.0	42.1
Civ-Slightly Worse	18.4	18.7	12.4	17.7	16.9
Civ-Lot Worse	2.6	3.4	2.4	2.0	2.2
Number Respon.	1,894	2,680	2,238	2,406	9,218
Source: Author					

TABLE A-66
CIVILIAN VS. MILITARY--WORK SCHEDULE/HOURS

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	42.0	40.5	36.6	32.7	37.8
Civ-Slightly Better	27.7	29.3	31.6	27.8	29.2
About the Same	24.3	22.2	24.9	31.8	25.8
Civ-Slightly Worse	5.0	6.2	5.7	6.7	6.0
Civ-Lot Worse	0.9	1.8	1.2	1.0	1.3
Number Respon.	1,910	2,680	2,242	2,413	9,245
Source: Author					

TABLE A-67
CIVILIAN VS. MILITARY--JOB SECURITY

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	9.4	3.5	3.5	9.4	6.3
Civ-Slightly Better	10.7	3.5	7.1	12.8	8.3
About the Same	37.9	29.2	31.3	32.1	32.3
Civ- Slightly Worse	32.3	46.9	41.8	37.0	40.1
Civ-Lot Worse	9.7	16.8	16.3	8.6	13.1
Number Respon.	1,906	2,678	2,235	2,405	9,224
Source: Author					

TABLE A-68
CIVILIAN VS. MILITARY--EQUIPMENT

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better Civ-Slightly Better	30.3 27.1	22.5 29.5	43.3 27.9	26.2 28.1	30.1 28.2
About the Same	38.3	41.8	25.2	40.8	36.8
Civ-Slightly Worse Civ-Lot Worse	3.8 0.5	5.0 1.2	2.6 1.1	4.2 0.8	4.0 0.9
Number Respon.	1,907	2,677	2,240	2,409	9,233
Source: Author					

TABLE A-69
CIVILIAN VS. MILITARY--JOB LOCATION

	Army	Navy	Marine	Air Force	DoD
Civ-Lot Better	34.9	28.5	38.0	31.9	33.2
Civ-Slightly Better	26.2	26.7	26.7	28.7	27.1
About the Same	35.6	40.1	32.8	36.5	36.4
Civ-Slightly Worse	2.6	3.5	1.7	2.5	2.6
Civ-Lot Worse	0.7	0.8	0.8	0.4	0.7
Number Respon.	1,904	2,681	2,244	2,417	9,246
Source: Author					

TABLE A-70
CIVILIAN VS. MILITARY--COMPENSATION

Army	Navy	Marine	Air Force	DoD
13.1	12.7	8.9	10.3	11.2
23.1	19.8	21.1	22.2	21.4
18.6	17.1	18.4	17.1	17.7
22.1	24.5	25.8	24.3	24.3
20.5	23.1	21.9	23.4	22.4
2.7	2.7	3.9	2.6	2.9
1,934	2,706	2,265	2,427	9,332
	13.1 23.1 18.6 22.1 20.5 2.7	13.1 12.7 23.1 19.8 18.6 17.1 22.1 24.5 20.5 23.1 2.7 2.7	13.1 12.7 8.9 23.1 19.8 21.1 18.6 17.1 18.4 22.1 24.5 25.8 20.5 23.1 21.9 2.7 2.7 3.9	13.1     12.7     8.9     10.3       23.1     19.8     21.1     22.2       18.6     17.1     18.4     17.1       22.1     24.5     25.8     24.3       20.5     23.1     21.9     23.4       2.7     2.7     3.9     2.6

TABLE A-71

FUTURE MILITARY PERSONNEL WILL NOT HAVE AS GOOD MILITARY BENEFITS

	Army	Navy	Marine	Air Force	DoD
Agree Neutral Disagree	80.6 13.9 5.4	69.4 14.2 6.0	84.0 10.6 5.4	85.4 10.1 4.5	84.4 12.2 5.7
Number Respon. Source: Author	1,936	2,714	2,273	2,438	9,361

TABLE A-72

MY MILITARY PAY AND BENEFITS DO NOT KEEP UP WITH INFLATION

	Army	Navy	Marine	Air Force	DoD
Agree Neutral Disagree	87.5 6.6 5.9	87.7 6.2 6.1	92.5 3.8 4.1	90.0 4.6 4.6	89.5 5.3 5.2
Number Respon.	1,933	2,714	2,271	2,438	9,356
Source: Author					

TABLE A-73

MY FAMILY BETTER OFF WITH ME IN CIVILIAN JOB

	Army	Navy	Marine	Air Force	DoD
Agree Neutral Disagree	47.6 34.4 17.9	51.9 32.4 15.7	52.2 32.1 15.7	46.6 38.7 14.7	49.7 34.4 15.9
lumber Respon.	1,916	2,693	2,257	2,410	9,276

TABLE A-74
FINAL RANK EXPECTED

	Army	Navy	Marine	Air Force	DoD
03	9.8	13.4	12.3	13.6	12.5
04	10.2	18.5	14.3	14.2	14.6
05	43.9	33.1	43.5	41.6	40.1
06	31.3	31.4	23.4	26.3	28.1
07	2.6	1.3	2.3	1.6	1.9
08	1.6	1.2	1.9	1.8	1.6
09	0.1	0.6	1.0	0.3	0.5
010	0.4	0.4	1.3	0.5	0.6
Number Respon.	2,883	3,898	3,269	3,660	13,680
Source: Author					

TABLE A-75

FUTURE PLANS FOR NATIONAL GUARD/RESERVES SERVICE

	Army	Navy	Marine	Air Force	DoD
Yes	9.5	6.6	5.5	3.4	6.1
Probably	17.6	18.3	14.2	15.0	16.3
Probably Not	22.7	23.2	21.3	24.5	23.0
No	35.5	38.8	47.6	42.3	41.2
Don't Know	14.7	13.0	11.4	14.9	13.4
Number Respon.	1,945	2,726	2,282	2,444	9,397

TABLE A-76
YEARS OF SERVICE INTENDED

	Army	Navy	Marine	Air Force	DoD
1 to 10 Years 11 to 19 Years 20 Years Over 20 Years	22.9 2.3 40.3 34.5	26.4 3.5 33.5 36.6	19.2 2.7 37.8 40.7	19.5 2.7 40.3 37.5	22.2 2.8 37.8 37.3
Number Respon. Source: Author	3,856	5,300	4,464	4,792	18,412

### APPENDIX B

## **CENSUS REGIONS**

The four census regions used in Table 8 were Northeast, North Central, South, and West.

The Northeast region of the United States includes Main, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

The North Central region is constituted by Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

The South is Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

The West includes Montana, Idaho, Wyoming, Colarado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

### APPENDIX C

## VARIABLES USED FOR ANALYSIS IN SECTION IV

This Appendix presents the variables used for analysis in Section IV.

## Dependent Variable

The dependent variable was years of service intended. The variable was recorded from a continuous variable in years into two groups, careerist and noncareerist. Careerist included twenty or more years of intended service and noncareerist was less than twenty. Years were truncated to integers.

## Delimiting Variables

The delimiting variables were sex, race, and current years of service. Sex was coded 0 = female, and 1 = male; race was coded 0 = other, and 1 = Caucasian; years of service was computed from months of service by dividing months by 12 and truncating to the integer.

## Independent Variables

- 1. Satisfaction With Military Life. This variable was derived from the question about the respondents' overall satisfaction with military life in general. It was measured by a Likert-type scale with answers on a continuum from very dissatisfied (1) to very satisfied (7).
- 2. Feelings About Current Location. This variable attempted to measure the respondent's general satisfaction with the current geographic assignment. It was measured on a Likert-type scale with responses as in item 1 above.
- 3. Civilian Vs. Military--Chance for Interesting Work. This variable was one of a series which was based on responses to questions comparing the military job of the respondent to anticipated or comparable

civilian job. This specific variable compared the two in the area of opportunity for interesting work. It was measured on a Likert-type scale ranging from civilian much better (1) to civilian much worse (2).

- 4. Civilian Vs. Military—People Work With. This was another of the variables comparing military and civilian jobs. It attempted to measure satisfaction with the people with whom one worked. It was measured on the same Likert scale as item 3.
- 5. Civilian Vs. Military--Job Location. As in items 3 and 4, this measured satisfaction with the geographic location of the job.
- Civilian Vs. Military--Chance for Promotion. This was another of the civilian/military job comparisons. This time, it examined perceptions of promotional opportunity.
- 7. "My Family Better Off With Me in a Civilian Job." This variable was based on a statement to the effect that the respondents' family would be "better off" with them in a civilian job. Answers were on a Likert-type scale ranging from strongly agree (1) to strongly disagree(2).
- 8. No Obligated Service Remaining. This was a dummy variable created by computing and recoding possible responses to a question asked for specific periods remaining on the current period of obligated service. It was measured O/1 (No/Yes).
- 9. Permanent Change of Station (PCS) Problem--Finding Off-duty Employment. This variable was developed from a series of questions concerning problems the respondent had encountered during PCS transfers. This one specifically addressed locating civilian off-duty employment. It was recoded and measured 0/1 (No/Yes).
- 10. Commissioning Source—Health Professional Scholarship Program (HPSP). This variable was a dummy variable created by recoding of the question asking for a source of entry into military service. The four most frequent responses of physicians were Dirrect Appointment, Medical Specialties Program, HPSP, and other. These were recoded as separate dummy variables with direct appointment as the base.
- 11. Age When Entered Service. The age of the respondent at the time of initial entry into the military service was a continuous variable measured by years of age.

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